MANAGEMENT REPORT

PHASE I/II INVESTIGATIONS AT THE JOHN HENRY SITE, 7NC-J-223 SR 1 CORRIDOR, PINE TREE CORNERS

New Castle County, Delaware

Parent Agreement No. 729-2
Statewide Archaeological Resource Project

Prepared For:

THE DELAWARE DEPARTMENT OF TRANSPORTATION

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ABSTRACT

The Cultural Resource Group of Louis Berger & Associates, Inc. (LBA), has conducted Phase I/II archaeological studies at the John Henry Site (7NC-J-223) in Pine Tree Corners, southern New Castle County, Delaware. The site is within the right-of-way of relocated Blackbird Landing Road, part of the Smyrna to Pine Tree Corners segment of SR 1. The archaeological testing was conducted to assist the Delaware Department of Transportation, Division of Highways (DelDOT), in compliance with Section 106 of the National Historic Preservation Act and other federal and state historic preservation mandates.

The John Henry Site was located in the yard of a standing house occupied from 1882 to 1927 by Arthur John Henry, a black farmer. The house has been moved at least twice, during the construction and widening of the Dupont Highway. During the Phase I/II testing, no artifact deposits were discovered that dated to the period before the house was moved. The landscaping of the lot appears to be no more than 40 years old. The John Henry Site therefore does not appear to have sufficient integrity for listing in the National Register of Historic Places.

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I. INTRODUCTION

The Cultural Resource Group of Louis Berger & Associates, Inc. (LBA), has carried out Phase I/II archaeological studies at the John Henry Site (7NC-J-223) in Pine Tree Corners, New Castle County, Delaware. The project area, which measures approximately 1.1 acres, is the yard of the John Henry House (CRS #N-5876), a standing structure at the intersection of U.S. Route 13 and Blackbird Landing Road (Figure 1). The John Henry House was constructed before 1882 on the west side of U.S. Route 13, across the road from where it now stands. In 1882 it was purchased by Arthur John Henry, a free black man, who lived in the house until his death in 1927. In 1920, during the construction of the Dupont Highway, the house was moved to the east side of the highway. It was moved again, to its current position, in 1931. The standing house has been separately studied by Rebecca J. Siders of the Center for Historic Architecture at the University of Delaware.

Since the John Henry House had already been identified as a historic property, no separate Phase I survey of the project area was carried out. Instead, fieldwork proceeded immediately to testing at the Phase II level. The goals of the fieldwork were to identify any areas of intact yard deposits, search for architectural features that might provide clues to the layout of the property, and look for any features that might include well-preserved artifact deposits more than 50 years old. This project has also included the development of a preliminary historic context for African-American "House and Garden" sites from the 1865 to 1930 period in Delaware.

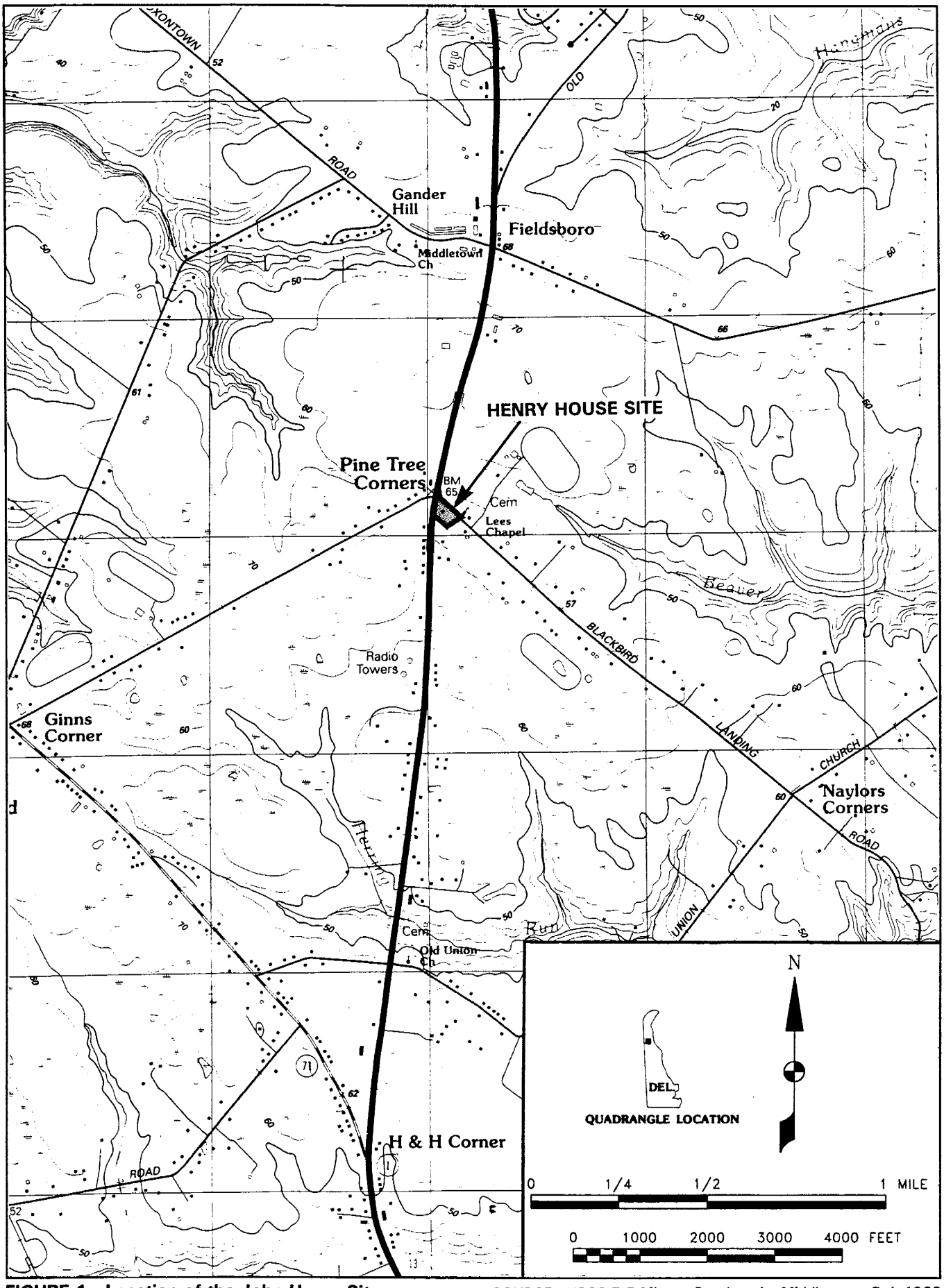

FIGURE 1: Location of the John Henry Site *SOURCE: USGS 7.5 Minute Quadrangle, Middletown, Del. 1963*

II. HISTORICAL CONTEXT

A. HISTORY OF THE PROPERTY

Arthur John Henry was born in Delaware on August 19, in 1848 or 1849. In 1870, he was employed as a farm laborer in Appoquinimink Hundred, in the household of a white farmer named Nehemiah Davis. The Davis household included four other African-American farm laborers. According to the census, A.J. Henry was the only one of these four men who could read, and none of them could write (U.S., Bureau of the Census 1870:348). In 1877, shortly after his marriage to Rachel Brisco, A.J. Henry purchased 8.34 acres of land on the southeast corner of the State Road (now U.S. Route 13) and Blackbird Landing Road for $250. The deed does not indicate whether this tract of land included a house, and the price would suggest that it did not (New Castle County [NCC] Deed Book C11:99). Nevertheless, A.J. Henry was a resident of Pine Tree Corners by 1880, when the census taker listed "John Henry" as the head of a household which included his wife, Rachel, and two children (U.S., Bureau of the Census, E.D. 31, 1880:387).

In 1882, A.J. Henry bought his second piece of land at Pine Tree Corners, a one-acre lot at the southwest corner of the State Road and Pine Tree crossroad, which included a two-story frame house, almost certainly the house now known as the John Henry House. He bought the house and lot for $135 from Abram Ingram, who held the property in trust for John A. Ingram. The house was probably built between 1849 and 1860, since the Rea & Price map of New Castle County, published in 1849, does not indicate any structures on the southwest corner of the crossroads. Abram Ingram had bought 40 acres of woodland at the southwest corner in 1848 for $300. Eleven years later, in 1857, Ingram sold 33 acres of the tract to Miles T. Jones for $2,300. At that time, the deed specified that the property included "buildings and improvements." The presence of the house was verified in 1860, when Jones sold a one-acre lot with a two-story house back to Abram Ingram for $450. The 1860 deed also notes that a storehouse was attached to the dwelling (NCC Deed Books A6:514, B7:189, B9:409).

A.J. Henry described himself as a laborer rather than a farmer on the 1880 federal census. He was not included on the 1880 agricultural schedule. In 1899, Henry bought 31 acres of land on the west side of the State Road, about 3,600 feet south of the Pine Tree crossroads. The following year, he was listed in the federal census as "farmer." Henry had risen in 20 years from a landless laborer to the owner of more than 40 acres of land, an impressive accomplishment. According to the 1900 census, his wife, Rachel, had died, and both his daughters, Jennie and Elizabeth Ann (also known as Anna Elizabeth), lived away from home. Jennie Henry, in fact, was a servant in the household of a white tenant farmer in Appoquinimink Hundred. The only person living with A.J. Henry was his son, Harrison, who was then 20 years old. The sequence of families visited by the census taker in 1900 suggests that A.J. and Harrison Henry may not have been living in the house at the southwest corner of Pine Tree crossroads, but it is not known where else they might have lived (U.S., Bureau of the Census, E.D. 47, 1900:8A, 21B).

A.J. Henry insured his property with the Kent County Mutual Insurance Company on December 28, 1894. The insurance policy covered a 16-by-~~1~~6-foot, one-and-one-half-story dwelling valued

at $200; a two-story stable, 12 by 22 feet in size, valued at $135; one horse; one cow; and household furniture (Kent County Mutual Insurance Company, Policy No. 17260).

Jennie, Harrison, and Elizabeth Ann Henry all married in the decade between 1900 and 1910. Jennie married Robert H. Hicks, a Marylander. By 1910 they were renting a house in the Pine Tree Corners neighborhood. Elizabeth Ann married Levi Watson, Jr., the son of a Pine Tree Corners farmer. They also rented a house at Pine Tree Corners, as did Harrison and his wife, Cora. Robert H. Hicks, Levi Watson, Jr., and Harrison Henry were all employed as farmhands. A.J. Henry was absent from Pine Tree Corners when the census taker visited the neighborhood in April 1910. One of his children, most likely Harrison Henry, may have lived in the John Henry House at the time (U.S., Bureau of the Census, E.D. 97, 1910:7A, A-B). Unfortunately, neither A.J. Henry nor his children were included in the *Farm Journal and Business Directory of New Castle County* published in 1914, which would have provided information on the road on which they lived. Perhaps small-scale African-American farmers, who were unlikely to subscribe to the journal, were omitted from its pages.

Harrison Henry may still have occupied his father's house in 1920. He and his wife, Cora, and their seven children were enumerated in a house on the State Road. However, A.J. Henry, referred to as "Jack" Henry, lived next door to his son in what was probably the house he owned at Pine Tree Corners. Elizabeth "Lizzie" Ann and her husband, Levi Watson, also lived along the State Road. Jennie and her family appear to have moved away from the neighborhood (U.S., Bureau of the Census, E.D. 173, 1920:10B, 12B). Harrison Henry died of tuberculosis in 1922, at the age of 43. He was buried in Townsend (Division of Health and Social Services 1922, Death Certificate No. 1893).

In 1920, the Delaware State Highway Department drew up plans to construct the Dupont Highway, then referred to as Route No. N-1, utilizing sections of the State Road (DelDOT Road No. 1, NCC, Project No. 27). Alterations of the intersection of the State Road with Pine Tree Road and Blackbird Landing Road put A.J. Henry's house directly within the new right-of-way (ROW). Henry's other property, which also fronted the State Road, was also affected by changes in the ROW. He conveyed enough land along his properties, except for his house lot, to give the State Highway Department 40 feet on either side of Dupont Highway's center line (NCC Deed Book M32:223). Henry entered into an agreement with the State Highway Department whereby he exchanged his property in the ROW, at the intersection of the Dupont Highway and Pine Tree Road, in return for the removal of his house to his property on the east side of the Dupont Highway. The removal of A.J. Henry's house to the east side of Dupont Highway was completed by December 1923. Construction of the highway decreased the dimensions of his property to seven acres at the southeast corner and one-half acre at the southwest corner of the crossroads (NCC Will File 12349).

In 1924, A.J. Henry sold part of his former house lot to Bertha Goodrich, who paid $200 for a triangular lot lying adjacent to Dupont Highway and Pine Tree Road. In the following year, she bought additional land on Henry's former house lot. By 1931, Bertha Goodrich's lot was the site of Pine Tree Service Station (DelDOT Road No. 1, NCC, Project No. 220; NCC Deed Book

L33:90, W33:147) (Figure 2). A.J. Henry also sold one small parcel of his property on the east side of the highway. John and Harriet Terry of Wilmington bought the half-acre parcel on the southern edge of A.J. Henry's "home place" in 1927 for $125. Two other building lots were carved out of A.J. Henry's 31-acre property on the west side of Dupont Highway during the 1920s. One of these was a two-acre parcel on which the Owl Inn was built (NCC Deed Books C34:588, B35:577, F35:253).

A.J. Henry died of cardiac asthma in May 1929, and was buried at Lee's Chapel (Division of Health and Social Services 1929, Death Certificate No. 1384). He left his daughter, Elizabeth Ann Watson, all of his remaining property on the east side of U.S. Route 13, including the house. His daughter, Jennie Hicks, inherited the remaining land on the southwest corner of the crossroads and a small lot which had been the site of "Lee's Chapel Colored School." His daughter-in-law, Cora Henry, inherited a seven-acre tract of land that A.J. Henry had bought on the north side of Pine Tree Road, a little west of the crossroads. All three heirs inherited the 31-acre tract on the west side of U.S. Route 13, which they divided equally as their father had wished. The total market value of A.J. Henry's real estate was $1,200 (NCC Will File 12349).

When he died, A.J. Henry's most valuable assets were two cows, two calves, two mares, a plow, a cultivator, a farm wagon, and $80 worth of tomatoes. He had $230.17 in savings and a life insurance policy with the Metropolitan Life Insurance Company worth another $100 (NCC Will File 12349). The home insurance policy held with the Kent County Mutual Insurance Company was not transferred to the name of Elizabeth Ann Watson (also known as Anna Elizabeth Watson) until October 5, 1932. Elizabeth Watson kept the same buildings insured, and also covered two horses. The policy was not canceled until 1955 (Kent County Mutual Insurance Company Policy No. 17260).

In 1931, U.S. Route 13 was widened to four lanes, and the John Henry House was moved again. A plan made in that year shows the house under the proposed northbound lanes. This plan (see Figure 2) also shows a large barn and two sheds on the Watson property.

Elizabeth Ann Watson retained the property on the east side of U.S. Route 13 containing the John Henry House until her death in 1971. She may have lived in the house until she was admitted to the Delaware Home and Hospital for the Chronically Ill at Smyrna. Her daughter, Clara Watson, was probably living in the John Henry House with her mother. At the time of her mother's death, Clara Watson was living on Pine Tree Road, which was the address given for the John Henry House (NCC Will File 59629). The John Henry House remained in the hands of Clara's heirs until 1996, when it was purchased by the state of Delaware (NCC Deed Book 2147:295).

B. BACKGROUND: AFRICAN-AMERICANS IN DELAWARE, 1865 TO 1930

African-Americans made up between 14 and 17 percent of the population of nineteenth-century Delaware. The 1860 census recorded 21,617 blacks in the state, and the 1890 census recorded 28,386. Even before the Civil War, most Delaware blacks had been free. Because of economic

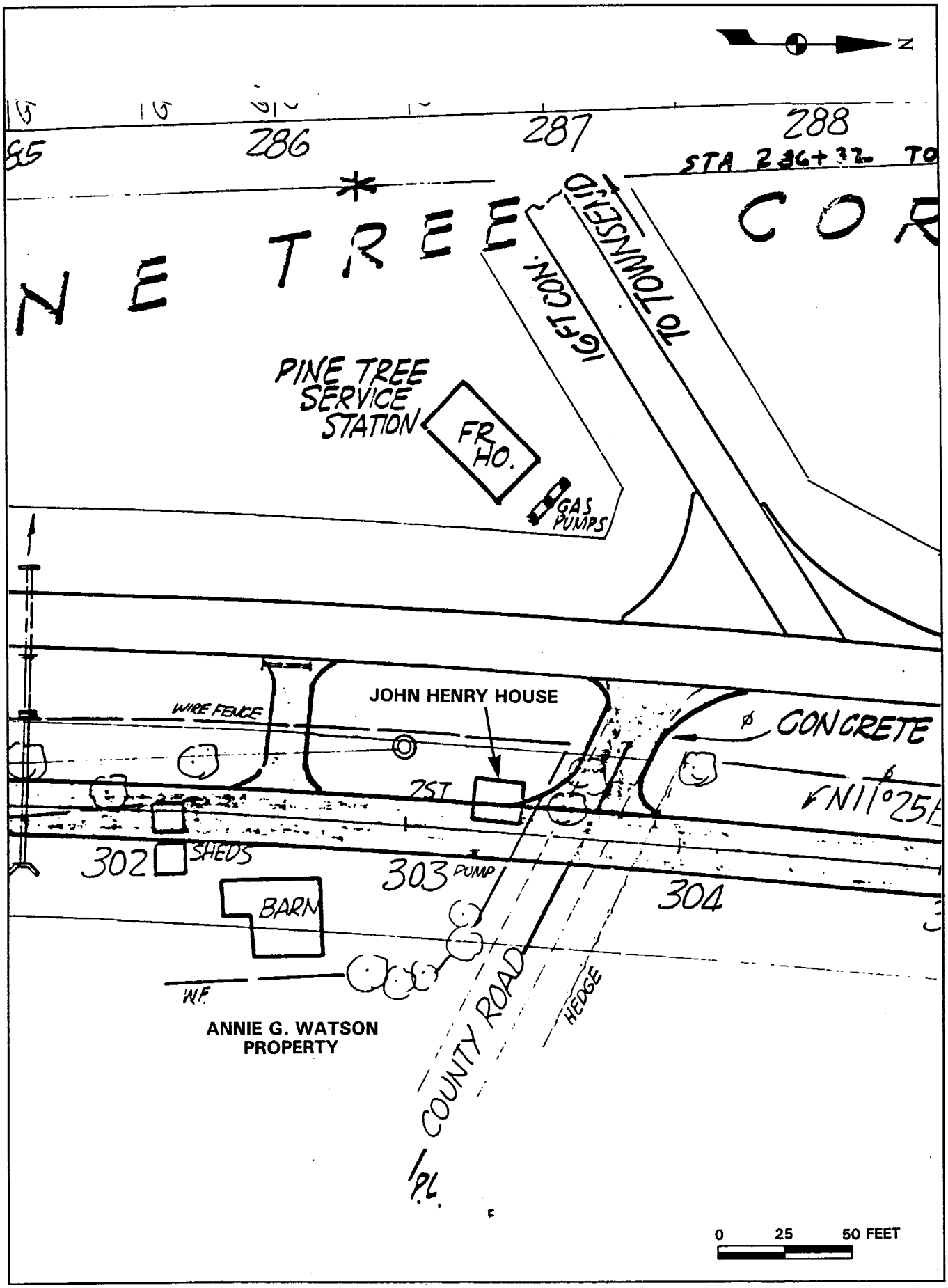

FIGURE 2: Plan of the Annie E. Watson Property in 1931 *SOURCE: DelDOT Road No. 1 1931*

circumstances, and the agitation of the vocal and vehemently antislavery Quaker minority in Delaware, the number of slaves in the state fell from 6,153 in 1800 to 1,798 in 1860, comprising 8 percent of Delaware's black population. The African-American population was also geographically stable, with little migration into or out of the state. In the 1865 to 1930 period, therefore, most of Delaware's African-Americans had never been slaves, nor had their parents been slaves.

Although most African-Americans in nineteenth-century Delaware were free, they were nevertheless not equal. Until the passage of the Fourteenth Amendment in 1870, African-Americans could not vote, and their brief entry into the electorate was curtailed by the passage, in 1873, of a poll tax bill. The tax was only a dollar, but the authorities, especially in Kent and Sussex counties, made it almost impossible for blacks to pay it. Black voting in the 1870s and 1880s was therefore negligible. The poll tax was repealed in 1897 because of the activities of "Gas" Addicks, a wealthy Philadelphian, who tried to make himself a U.S. Senator from Delaware by paying the poll tax of thousands of new black voters. However, the barriers of a literacy test, hostile local officials, and the lack of effective political leadership still kept African-Americans from effectively using the political process until the 1930s.

The state's political system, without African-American representation, enacted systematic discrimination against blacks. African-Americans did not serve on juries (which were drawn from the voting lists) and, unlike whites, could be imprisoned for debt. Particularly offensive to spokesmen for African-Americans was a determined attempt by whites to prevent blacks from obtaining any education (Lewis 1981). Schools for blacks had been set up by Quakers in Wilmington as early as 1797, but these schools could handle only a few dozen students. In 1865, the great majority of Delaware's blacks were illiterate, and white leaders, especially in Kent and Sussex counties, were determined to keep them that way. Attempts by Quakers to establish schools in the southern part of the state were met with violence. In 1865, an unnamed Wilmington insurance actuary set a 25 percent annual premium for fire insurance for black school buildings in Kent and Sussex. Events showed that the actuary was good at his job: white mobs burned nearly a dozen schools in those counties between 1867 and 1875 (Livesay 1968:105). In 1875 the city of Wilmington took over the "colored" schools in its jurisdiction, and for the next 50 years that city provided by far the best education for African-Americans in the state. Also in 1875, the state enacted a law taxing its black citizens to provide education for black children. The "separate but equal" schools that resulted did manage to reduce illiteracy, but outside Wilmington they lacked the resources for anything more ambitious. It was only in the 1920s that any significant improvement came to Delaware's educational system for blacks, and then it was not the state that provided the funds but a private philanthropist, Pierre Du Pont, who spent $5,000,000 building and improving schools.

Discrimination against African-Americans, and the difficulties of obtaining an education, excluded blacks from most employment categories. The 1890 census, the first to track employment in a detailed way, counted among black professionals two bankers, one lawyer, five physicians, and two managers (Livesay 1968). African-Americans comprised more than 2 percent of the workers in only three skilled trades, iron and steel work, railroad work, and engineer work. Among some

trades, such as cabinet making, there had even been a decline in black participation since before the Civil War. By contrast, African-Americans made up 40.2 percent of agricultural laborers, 39.0 percent of nonagricultural laborers, 53.5 percent of servants, and 30.5 percent of teamsters; 92 percent of black workers fell into one of those categories.

Not surprisingly, most African-Americans were poor. A small black middle class did develop in Wilmington, but outside that city blacks in Delaware made virtually no economic progress before World War I. De Cunzo and Garcia (1992) studied tax records from six rural hundreds in 1850 and 1870, and they found no blacks in the top half of the population by wealth. Blacks working in agriculture were overwhelmingly classified as laborers. Analysis of the 1870 census from Little Creek Hundred showed that 22 percent of a total of 54 households engaged in agriculture were black, but only 5 were farmers; the rest were "farm hands." In these families, sons over 12 were usually also listed as farmhands (De Cunzo and Garcia 1992:78). The 1890 census recorded 818 African-American farmers in the state, but their farms were overwhelmingly small ones, and most were located on poor agricultural land.

One rather puzzling statistic for the later nineteenth century is that while the number of African-American farm owners increased, the number of tenant farmers decreased. De Cunzo and Garcia (1992:79) write that this trend reflected the consolidation of smaller farms into the hands of fewer, wealthier farmers in this period. A recent study of blacks in southern Virginia, however, suggests a different explanation. Edna Medford (1992) found that economic conditions for freed blacks were much better in the mixed farming area of Virginia than in the cotton south, and that some blacks were able, through wage labor, to save enough to buy their own farms. This research also suggests that they generally avoided renting farms because they feared being cheated. Given the choice, the black farmers of southern Virginia preferred to work as wage hands until they could afford their own farms, rather than become tenants. Perhaps the decline in black tenancy in late nineteenth-century Delaware shows a desire for independence, not an economic decline.

C. DEFINITION OF THE AFRICAN-AMERICAN HOUSE AND GARDEN SITE TYPE

The definition of an African-American House and Garden site type must be both descriptive and associative. The term is descriptive, since properties of the House and Garden site type share a common architectural style, a common situation in the landscape, and a common history. It is associative, in that only historical research can confirm that the occupants of a given site were African-Americans.

The House and Garden site type was originally proposed as an architectural category. The houses of this type often follow a common plan, consisting of a story-and-a-half main block, typically with two rooms on the ground floor, with a single-story kitchen shed on the back. The houses are almost always frame (a few of the earlier ones were log), originally covered with clapboards or wooden shingles and now sometimes clad in asphalt or asbestos shingles. Houses of this type were built by Delaware landowners for their tenants beginning in the late eighteenth century, but most standing examples were built between 1850 and 1920. Besides a common dwelling type,

these sites also share a common situation in the landscape. In Delaware, farm complexes are commonly situated in the middle of the fields. House and Garden sites are almost always situated at the edges of the fields, either against the tree line behind the main house or along a road. Usually the house and garden are some distance away from the main house but still within sight. A yard area around the house was usually set aside for the tenant's use, and most tenants had their own gardens on these plots.

After 1850, many Delaware landowners began selling or giving small properties, including houses of the House and Garden type, to their laborers. Although the details of the transactions are usually now impossible to recover, it seems that those properties that were "given" were actually partial payment for farm labor. The desire of laborers to own their own houses can be seen as a manifestation of the desire for independence described by Medford (1992). These properties typically measured from one half to two acres. The people who lived in them still often worked as laborers on the surrounding farms, but they could supplement their incomes by gardening and raising a few animals on their small properties. In the form of the house and the layout of the tenement, however, these owner-occupied properties were generally indistinguishable from tenant dwellings.

One of the characteristics of the House and Garden house type is that the structures were easily movable, and many of them had been moved more than once. The John Henry House, which conforms to the architectural type, has certainly been moved. The mobility of the houses creates difficulties for archaeological study of these sites. The current location of a house of this type is not necessarily the place where it stood when it was built. The date of the house is therefore not a reliable guide to the date of the archaeological site surrounding it, which must be established by other criteria.

The African-American House and Garden site type can therefore be defined as a domestic site of the 1865 to 1930 period which:

1) is in a rural setting;
2) was occupied by African-Americans;
3) is located on a small (less than 5-acre) parcel of land that either belonged to the occupants or was set aside for their use;
4) is situated at the edge of agricultural fields, not surrounded by them; and
5) included a small frame house similar to the House and Garden architectural type.

D. RESEARCH ISSUES

1. Income Strategy

Of key importance in the archaeological study of African-American sites is the income strategy of the residents. Black Americans responded to their economic marginalization with a variety of creative strategies for earning extra income, stretching their budgets, and making food and other useful products out of the wild resources around them (Borchert 1980; Stine 1990). "Soul

food," for example, was essentially based on a series of techniques for turning the cheapest meats and vegetables into good eating (Darden and Darden 1978). Although these strategies are usually thought of as necessary for survival, they can also be interpreted as manifestations of a desire for independence (Medford 1992) or social advancement. The career of A.J. Henry shows that through careful use of their resources, some black people were able to raise their status considerably.

The archaeology of House and Garden sites should include a careful effort to identify remains of income-stretching activities. Some activities that may be identifiable include hunting, wild-plant gathering, gardening, home manufactures (such as soap or liquor), and on-site butchering. Certain manufactured goods also provide evidence of subsistence activities; for example, canning jars represent home food preservation, and sewing supplies represent the home manufacture or repair of clothing (Stewart-Abernathy 1992).

Evidence of gardening and food processing, in particular, should be detectable on intact sites. Little flotation study has been done on nineteenth-century African-American sites in Delaware, but such studies elsewhere have proven fruitful. During excavations in the Howard Road Historic District in Washington, D.C., seeds recovered from soil flotation showed that the residents had kept backyard gardens which yielded squash, pumpkins, watermelons, and greens, and that they had made wine or brandy from plums, elderberries, and grapes (LBA 1986). Evidence of the cultivation of squash and greens was also found during excavations at the National Photographic Interpretation Center, also in Washington, D.C. (Soil Systems, Inc. 1983), and documentary sources also suggest that gardening was common (Borchert 1980). Alternatively, analysis of seeds recovered from flotation, or study of surviving landscape features, may show that much of a property was devoted to ornamental gardens. The post-World War II landscape at the John Henry Site has a large number of ornamental shrubs and small trees occupying the entire front area, and much of the side yards. It is not known whether the emphasis on ornamentals is a recent development, produced by a declining emphasis on income from gardening and stock raising, or if some African-Americans may have had ornamental gardens in the pre-1930 period.

The theme of Income Strategy is closely related to the Domestic Economy theme identified by De Cunzo and Garcia (1992), and, because of the focus on the use of the lot at the John Henry Site, to their Landscape theme as well. The Income Strategy theme also connects to a broad area of research on nineteenth-century farms—the question of self-sufficiency (Bedell et al. 1994; Stewart-Abernathy 1992). Spokesmen for American farmers often extolled their self-sufficiency, and many of the manufacturing activities practiced on small farms have been interpreted as reflecting a desire for self-reliance rather than purely economic considerations. People who worked for wages and owned only a few acres of land were obviously limited in the degree of self-sufficiency to which they could aspire, but the range of activities carried out on House and Garden sites needs to be evaluated in this light.

2. Ethnic Distinctiveness/Assimilation

Another important question about African-American people in the 1865 to 1930 period is the extent to which they maintained a distinctively black way of life, and, on the other hand, the

extent to which they participated in changes taking place in the broader American economy and in society. Ethnic markers may be present in housing, in diet, in the layout of farms, and in the choice of consumer goods purchased (Baker 1980; Deetz 1977; Stine 1990). Examination of the glass, ceramics, and other durable objects recovered should provide information about the residents' behavior as consumers and the extent to which they practiced foodways identifiable as African-American.

A substantial amount of archaeology has been done in Delaware on tenant farms from the nineteenth century (Catts and Custer 1990; Grettler et al. 1996; Hoseth et al. 1994; Taylor et al. 1987). The availability of material from such studies makes it possible to pursue two lines of comparative research. First, it is possible to compare sites occupied by African-Americans with sites occupied by whites and assimilated Native Americans (often referred to in Delaware as "Moors") (Heite et al. 1997). Second, if a House and Garden site is excavated, it should be possible to compare it to other kinds of tenant residences to see if the distinctive style of the House and Garden type is reflected in other aspects of the occupants' material culture. Extending the comparisons beyond Delaware, archaeologists should consider whether blacks in Delaware participated in a national African-American culture, or whether the cultural distinctions of the white society in different regions are reflected in the black experience. In other words, we need to ask whether the material life of a black family in the Middle Atlantic region had more in common with that of black families in the south or with that of their white neighbors (Hoseth et al. 1994:92-97).

This theme is closely related to the Social Group Identity, Behavior, and Interaction theme identified by De Cunzo and Garcia (1992:270).

3. Community Formation

House and Garden sites are sometimes relatively isolated on the landscape, but some were also part of a rural community (Heite and Blume 1995; for documentation of similar communities in southern Virginia see LBA 1997). Because of the rather small size of most of these properties, those located along roads could be situated quite close to their neighbors. The John Henry Site was located in Pine Tree Corners, where an African-American community developed early in the twentieth century around a crossroads and a Methodist Episcopal church that had been established before the Civil War. Joan Geismar (1982) believes that the establishment of the small, all-black Skunk Hollow community in Bergen County, New Jersey, was a response by African-Americans to discrimination. The process of the establishment of these black communities in rural Delaware and the impact of their development on the individual households that composed them are worthy of investigation. The development of these communities might be reflected in the archaeological record not only in the siting of the houses, but in different patterns of consumer behavior or different ways of using yard space, such as in the planting of more ornamentals.

This theme is related to the Social Group Identity, Behavior, and Interaction theme identified by De Cunzo and Garcia (1992:270).

4. *Modernization*

One important question to ask about property types from the recent past is whether, and to what extent, the way of life they represented still exists. A drive through central Delaware suggests that some people, black and white, still live in houses that either actually conform to the House and Garden type or are quite similar to that type. Some of these houses are located on one- to two-acre lots, containing the large gardens, sheds, and other features of small farms. Some of the residents may even work in agriculture. Yet nineteenth-century lifeways are certainly in decline in Delaware, as they are everywhere else. It seems that no examples of the House and Garden house type have been built in recent decades; this type of house has been displaced among the rural working class by mobile homes and houses of single-story design. The relationship between life in the 1865 to 1930 period and contemporary life could be pursued through oral history and material culture studies, with the goal of establishing the timing of important changes, the factors that caused them (e.g., electrification, the automobile, and mechanization of farming), and the impact of these changes on people's lives (Carlson 1990).

E. SUGGESTED ELIGIBILITY CRITERIA

House and Garden sites are not rare in central Delaware. With a rather cursory survey, the Center for Historic Architecture and Design of the University of Delaware identified 99 standing structures in New Castle and Kent counties that appeared to fit the architectural criteria for inclusion in the type. Also, these sites date to a period for which other kinds of records, including detailed maps, written documents, recorded interviews and music, and even living witnesses, are plentiful. Therefore, the requirements for listing these sites in the National Register of Historic Places under Criterion D should be demanding.

It is suggested that in order to be considered for listing in the National Register of Historic Places, a House and Garden site from the 1865 to 1930 period should possess substantial historic documentation, in the form of written records or living residents available to be interviewed. Indeed, without such documentation it will probably be impossible to determine if a site was actually occupied by African-Americans. In addition, the site should possess substantial integrity in the following three areas:

1) *Architectural integrity.* Architectural remains are always one of the most important categories of data sought by archaeologists, but they are especially important in this context. Whether the House and Garden dwelling type, as defined architecturally, has any clear social or cultural meaning has yet to be definitely established, and data on the relationship between the architecture and other aspects of the history and material culture of these sites are necessary to answer this question. A site where a substantially intact house and outbuildings dating to before 1930 are still standing would clearly possess architectural integrity. If a house has been moved from the site, the house can be identified still standing on another site, and the location of its foundations can be identified, the site would also possess architectural integrity. If archaeological remains of the house and other buildings are present, including foundations and numerous other

remains sufficient to reconstruct the likely size and appearance of the house and at least some of the outbuildings, architectural integrity would also be present. Surviving photographic evidence, or detailed information from informants, but not simple descriptions from tax or insurance records, should also be considered in assessing architectural integrity.

2) *Landscape integrity.* The use of the "garden" lot is one of the main foci of the research questions suggested here, so the integrity of the landscape should be a prime consideration in the determination of eligibility. The integrity of the landscape could be indicated by the presence of old fences, old trees, or old outbuildings in their original locations. A site that has been completely or largely plowed since abandonment would definitely lack landscape integrity. At the John Henry Site, flotation of soil samples was carried out to determine if seeds or similar garden remains were present. The presence of activity areas clearly defined by chemical signatures, artifact patterns, or structures should also be considered.

3) *Intact artifact deposits.* Sealed deposits of intact household refuse are always of great archaeological interest, and the identification of distinctive ethnic patterns in diet or consumer behavior will likely not be possible without such deposits. Priority should be given to sites that possess substantial intact refuse deposits that date to before 1930. If all the artifacts on a site come from a generalized yard scatter, the site would lack integrity in this area, especially if the site was occupied for an extended period.

Even a site that meets all of these criteria should not be automatically considered eligible for the National Register of Historic Places. The discovery of such a site should, however, lead to an evaluation of the possible contributions that documentation could make to our knowledge of regional history, and to the extent that such knowledge cannot be obtained from other sources.

III. PHASE I/II INVESTIGATIONS AT THE JOHN HENRY SITE

A. METHODS

Phase I/II fieldwork at the John Henry Site (7NC-J-223) began with the establishment of a grid over the site with its X-axis parallel to Blackbird Landing Road. Grid north therefore had a bearing of 45 degrees east of north. The limits of the testing were Blackbird Landing Road on the north, the Dupont Highway on the west, a fence that marked the property boundary on the east, and wetlands on the south. A plan of the site was prepared at a scale of 1 inch = 20 feet (Figure 3).

Shovel tests were placed at 20-foot intervals on east-west-running transects that were set 20 feet apart. Because of a field error, Transect B was actually 25 feet from Transect A and 15 feet from Transect C. Shovel tests on adjacent transects were offset by 10 feet. Transect A was on the N200 line, and Transect E was on the N120 line. Shovel tests were numbered consecutively from west to east. A total of 48 shovel tests were excavated on this site.

All shovel tests were 1.5 feet in diameter, and they were excavated into culturally sterile levels. All soils were excavated by natural or cultural horizons and screened through ¼-inch hardware mesh. Results of individual shovel tests were recorded on standard field forms developed by LBA, using Munsell color notations and USDA textural classifications. All artifacts from the shovel tests were retained for analysis.

Seven test units measuring 3x6 feet were placed to maximize and refine the information from this site. Since it was known that the house had been moved to its present location when U.S. Route 13 was expanded to four lanes, Test Unit 1 was to be placed inside the house to test for features or intact strata underneath the house's current location. The remaining test units were to be placed based on the results of the shovel tests. Test Unit 2 was placed southeast of the house between the two shovel tests on Transect C that had produced the highest artifact totals. Since there was otherwise no definite patterning to the shovel testing results, Test Units 3, 5, and 6 were placed on the east, north, and west sides of the house. Test Units 4 and 7 were placed to sample the area of the privy and barn.

Test units were excavated by natural strata. Strata more than 0.3 foot thick were separated into arbitrary 0.3-foot levels. The uppermost stratum in all test units was an old plowzone, but this stratum was also excavated in levels, in the hope of isolating recent (post-1950) deposits. All soils were screened through ¼-inch hardware mesh. Soils were described using Munsell color notations and USDA textural classifications, and the appropriate data were recorded on the standardized field forms developed by LBA. Two-liter samples of soil were collected from each level for paleobotanical analysis. Soil profiles were drawn for each unit, as were plan views, and these were recorded photographically in both black-and-white and color-slide film. Photos were also used to document general site conditions and features. All excavations were backfilled and the areas restored, as nearly as possible, to their original condition.

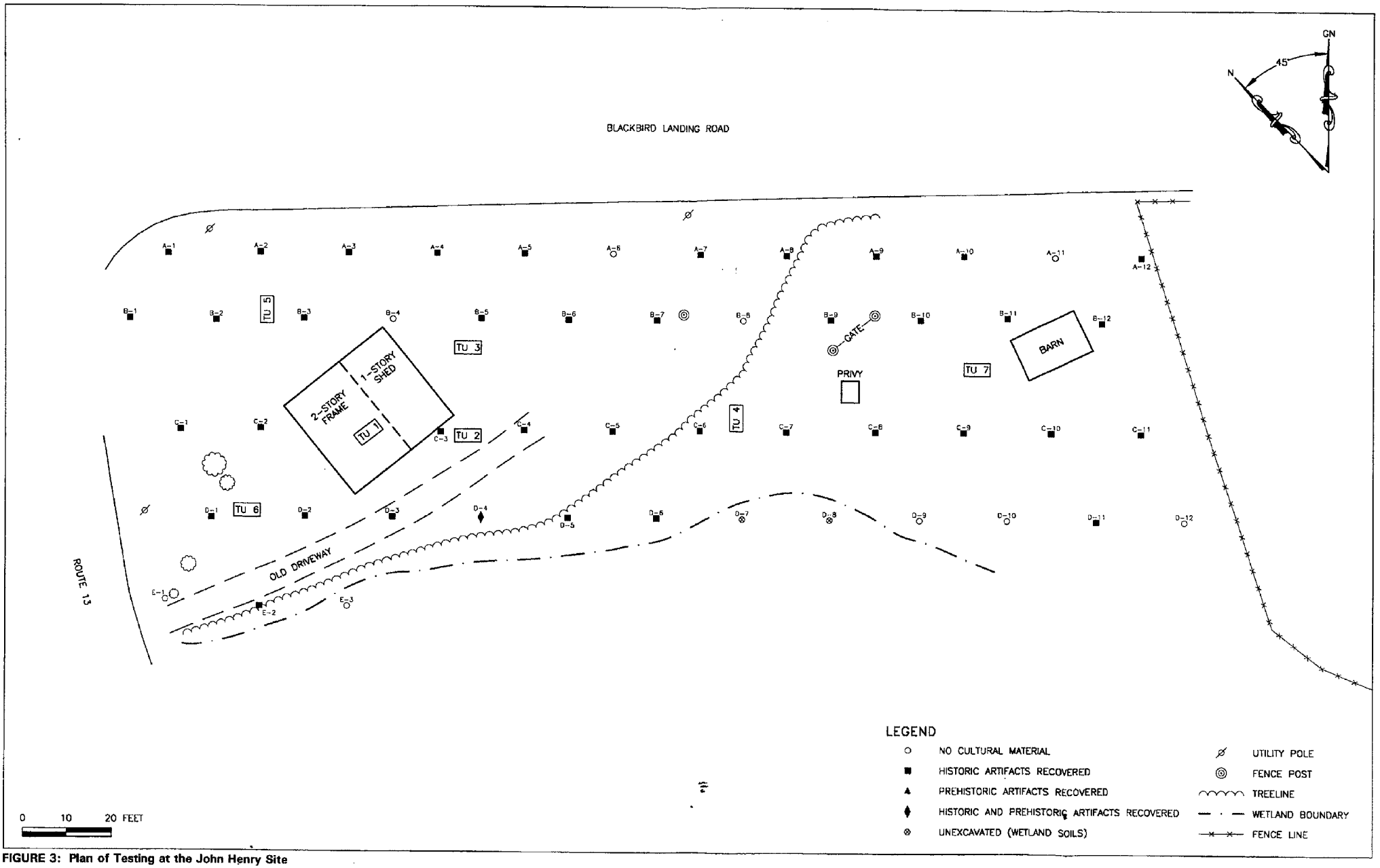

FIGURE 3: Plan of Testing at the John Henry Site

B. FINDINGS

A total of 308 historic artifacts and one prehistoric artifact were recovered from the 48 shovel tests. Only nine shovel tests were culturally sterile. The average artifact count per shovel test was six, with a standard deviation of 12. Only two shovel tests, Shovel Tests C3 (N=81) and C4 (N=27), had counts higher than one standard deviation above the mean. These two shovel tests were near the southeast corner of the house. Shovel Test D4, which formed an isosceles triangle with Shovel Tests C3 and C4, had a rather high count (N=10) in its Stratum C, which was probably a buried plowzone. The concentration of negative shovel tests showed no distinct patterning.

The shovel tests revealed varying stratigraphy across the project area. In general, the sand content of the subsoils increased toward the west, and the clay content increased toward the east. The area with the greatest elevation, east of Shovel Tests A6, B6, C5, and D9, coincided with the higher clay content.

Typically, in the west, Stratum A consisted of a dark grayish brown loamy sand. In the east, Stratum A was a dark yellow or olive brown loam or silt loam. These were interpreted as plowzone, because of the generally sharp interface and the consistent depth, and also from the historic record. The average depth to the base of the plowzone was 0.7 feet in the east and 1.0 feet in the west. In some cases in the west, the plowzone overlay unplowed A-horizon soil, which was designated Stratum B. In the east, plowing seemed to have extended into B-horizon soils. These were yellow brown and light yellow brown loams and sandy clays.

The areas in the immediate vicinity of the house, especially south and east, showed evidence of filling for landscaping. The shovel tests with high artifact counts were all located in this landscaped area. Shovel testing also showed that a gravel drive had been present south of the house, running from U.S. Route 13 to approximately even with the east wall of the house. A gate was present at the foot of the drive, framed by trees more than 30 years old.

The results from the test unit excavations provide a more complete picture of the John Henry Site stratigraphy. Test Unit 1 was placed inside the house, which was moved to its present location in about 1931 and now rests on a foundation of cinder blocks. It was thought that the presence of the house might have protected some deposits from later contamination. Also, an informant, John Henry's grandson, told members of the crew that a shed stood on the spot before the house was moved. Test Unit 1 did not yield as many recent artifacts as the other units. Artifacts were recovered from Strata A and B. Stratum A was the plowzone and Stratum B was thought to be a mix of plowzone and subsoil, caused by early occasional deeper plowing. In Test Unit 5, a plowscar was noted at the base of a similar mixed soil.

Test Unit 2 was excavated southeast of the house, between Shovel Tests C3 and C4. Test Unit 2 encountered complex stratigraphy and produced 950 artifacts, more than 40 percent of the artifacts recovered from the site. Four strata were defined (Figure 4). Stratum A was a layer of dark grayish brown topsoil nearly a foot thick, apparently landscape fill. Stratum B was a layer

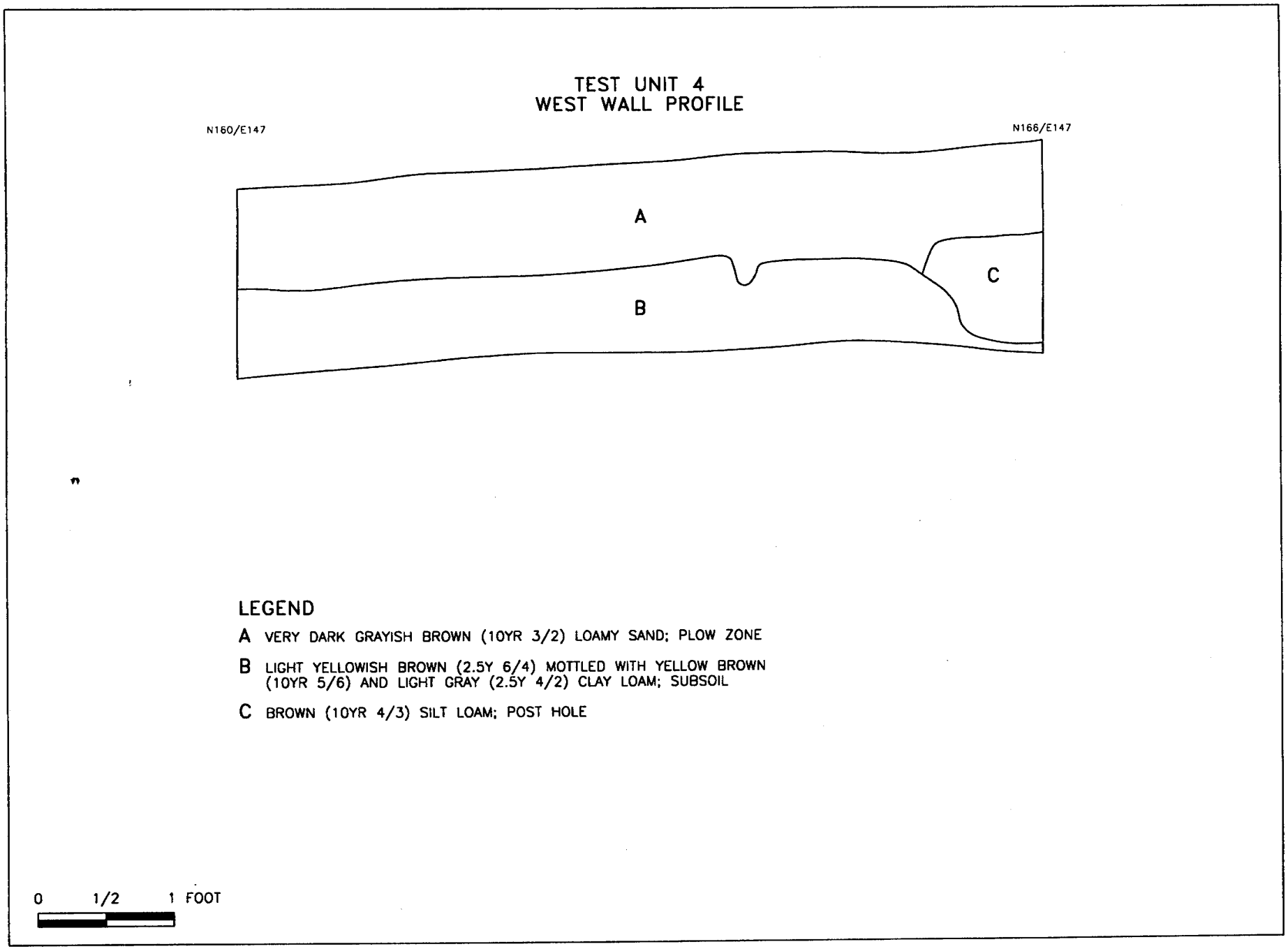

FIGURE 4: Stratigraphic Profile of Test Unit 4

of redeposited subsoil, approximately 0.3 feet deep. Stratum C was an old plowzone, and Stratum D was the natural subsoil. Because Test Unit 2 was so close to the house, it seems likely that the redeposited subsoil derived from digging its foundation. Stratum B therefore separated two A-horizons, one from before and one from after the house was moved in the 1920s. Most of the artifacts from the test unit were recovered from the top layer, and they can therefore be dated to the post-1920 period.

TABLE 1 HISTORIC ARTIFACT RECOVERY FROM TEST UNIT EXCAVATIONS

UNIT	STRATUM						
	A	B'	B	C'	C	D	TOTAL
1	28	-	15	-	0	-	43
2	865	69	-	16	-	0	950
3	145	-	0	-	-	-	145
4	663	-	1	-	0	-	664
5	27	-	0	-	-	-	27
6	35	-	0	-	-	-	35
7	207	41	-	-	0	-	248
TOTAL	1,970	110	16	16	0	0	2,112

Note: B' and C' represent fill strata encountered in Test Units 2 and 7.

Test Units 3, 5, and 6 were located on the other three sides of the house. Test Unit 5 was located northwest of the house, near the road intersection. Although it was highly disturbed by a rodent burrow in the south half, the north half was intact and very similar to Test Unit 1. Test Unit 6, in the front yard, was similar to Test Units 1 and 5, but it did not show the deeper plowzone. Test Unit 3, located behind the house, showed the same Ap- and B-horizon soils, with the addition of an overlying layer of landscaping fill. These units yielded very few artifacts.

Test Units 4 and 7 were placed to investigate the privy and barn area in the eastern portion of the site. Both revealed a clay loam subsoil mottled by mineralization, with the predominant shade a light yellowish brown and the mottling a brownish yellow and light gray (Figure 5). In Test Unit 7, two stacked plowzones were present, possibly indicating filling at some point. Moderately high counts of artifacts were recovered from the plowzones of these two test units, and essentially none from subplowzone contexts. The artifact mix seemed to be less contaminated by modern material than was seen in the fill strata of Test Unit 2.

The only features noted in the test units were small historic postholes in Test Units 4 and 6. These postholes were mapped but not otherwise investigated.

The artifact assemblage from the John Henry Site was dominated by cut and wire nails, bottle glass, window glass, and miscellaneous metal fragments, a fairly typical twentieth-century

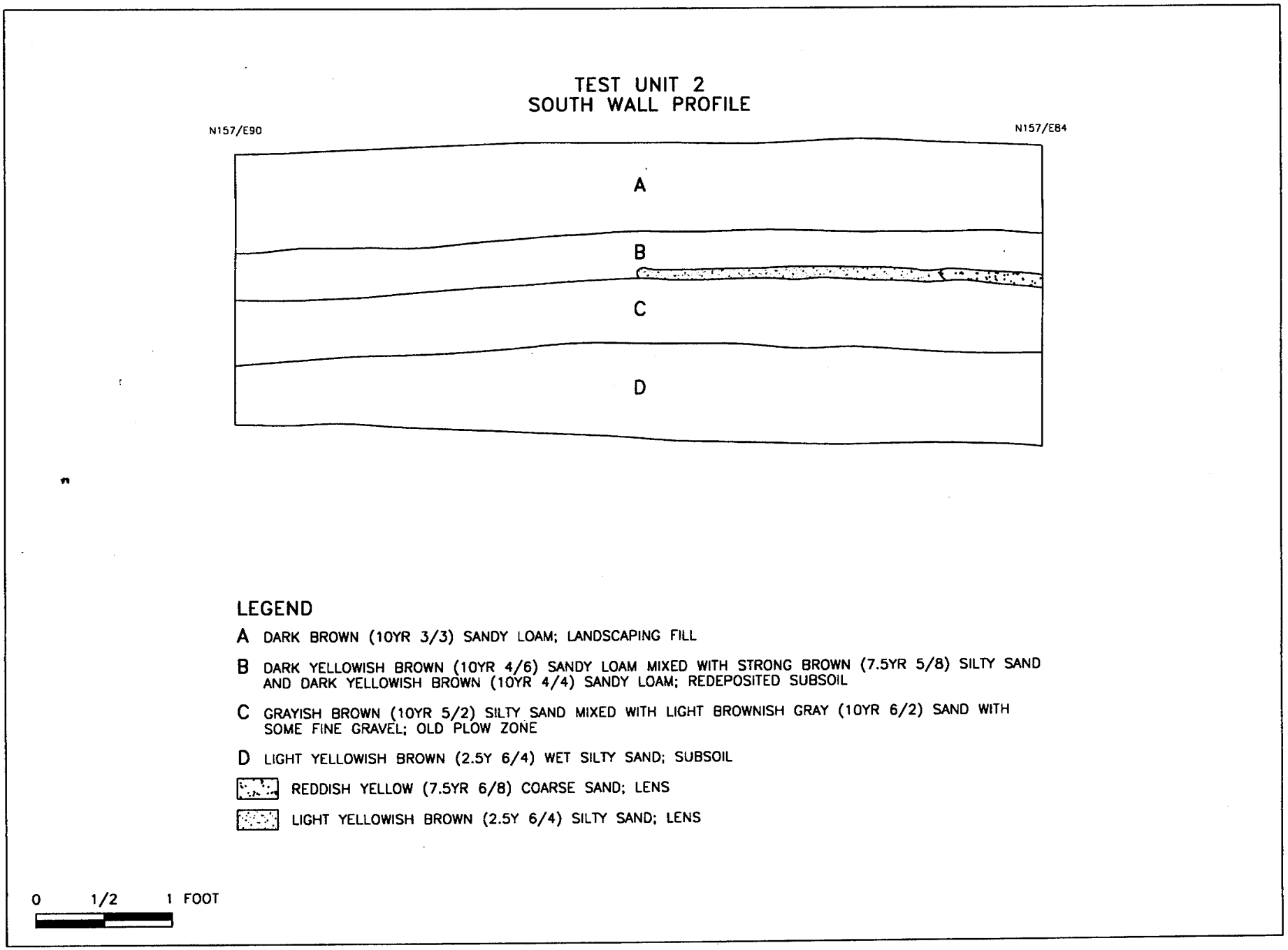

FIGURE 5: Stratigraphic Profile of Test Unit 2

assemblage. Recent artifacts, including styrofoam and plastic, were recovered from all levels of Stratum A. The dominant ceramic type found was ironstone, with some whiteware, redware, and terra cotta flowerpot fragments also recovered. Other objects recovered included fragments of canning jars and lids, asphalt shingles, a leather shoe sole, a wooden button, a lead or pewter charm from a charm bracelet, rubber fragments, crown bottle caps, brick, coal, and fragmentary animal bones. It had been thought possible that the John Henry House might have been built on the site of an earlier tenant dwelling, but if so, that dwelling must have been destroyed by the construction of the Dupont Highway. The only artifacts recovered dating prior to the A.J Henry occupation were a few pieces of pearlware, a sherd of delftware, and a single white clay pipestem.

The only prehistoric artifacts recovered were four jasper flakes.

IV. ETHNOBOTANICAL INVESTIGATIONS

A. HISTORIC LANDSCAPE ASSESSMENT

1. Natural Setting

The John Henry Site (7NC-J-223) consists of approximately 1.1 acres of mostly wooded land. The site is situated in southern New Castle County, Delaware, within the Drainage Divide zone of Delaware's Upper Atlantic Coastal Plain. Located at the southeast corner of U.S. Route 13 and Blackbird Landing Road at Pine Tree Corners, the site is bounded by U.S. Route 13 to the west, Blackbird Landing Road on the north/northeast, and active residential properties to the south. The project area has been significantly impacted by the construction and maintenance of U.S. Route 13: Modifications to the historic landscape have occurred due to the reconfiguration of topographic and surface water configurations and the relocation of the domestic structure during the early twentieth century.

The topography throughout the John Henry Site is gently sloping, and generally representative of the Atlantic Coastal Plain. Elevations within the project area range from 18 to 21 meters (60 to 70 feet) above mean sea level (amsl). Highest elevations occur at the house site at the northernmost limit of the project area. Lowest elevations are found within the wooded wetland zone at the southern periphery of the project area. This depression wetland is probably the much-altered remains of a groundwater-interfacing vernal pool called a Delmarva bay. These isolated and diminutive ponds are prevalent in the immediate vicinity of the subject property and, in a larger landscape context, are found in clusters and bands throughout the central backbone of the Delmarva peninsula. Because the ponds are fed by rainwater and groundwater, and have no significant watershed, they are often dry in late summer and autumn and full in the spring, rising and falling with groundwater levels. The vegetation growth pattern is often consequently divided into concentric rings in the pond, delineating the wetter and drier microclimates.

Most of the Delmarva bays in Delaware have been altered to some degree. The example at the John Henry Site has been entirely altered by agricultural practices and does not retain the singular vegetative character of this unusual landform. Although these pond features are classified as geomorphic anomalies, they are probably derived from ancient dune and swale systems associated with rising and falling Atlantic sea levels. Local tradition, however, held that the depression ponds were formed during the death throes of whales left stranded far from the sea by the recession of the biblical flood, and they are still called "whale wallows" by some local people. The John Henry Site lies within the Appoquinimink Drainage.

Soils at the John Henry Site are characterized by the Matapeake-Sassafras-Urban Land Association (Matthews and Lavoie 1970). Soil series mapped within the project area include Sassafras sandy loam, 2 to 5 percent slopes, moderately eroded. This series consists of deep, well-drained soils common to the uplands of the Coastal Plain in the southern part of New Castle County. Developed in beds of sandy sediments, Sassafras soils once supported a native forest of mixed hardwoods, and today support both forests and agriculture. Sassafras soils are easily

worked, have moderate available moisture capacity, and are well suited to a variety of crop uses. A modified wooded wetland dominates the southern portion of the project area. This area of the site is dominated by a moisture-tolerant deciduous canopy. Hydric soils in this wetland support a variety of hydrophilic plant species.

2. *Landscape Assessment*

Landscape ecology has direct application to archaeological investigations. Many alterations of the landscape are related to human activities, and these activities shape the development of subsequent vegetative communities (Cronon 1983; Watts 1975). Plant associations reflected in each ensuing succession are based on the age of dominant taxa, their rate of growth, their tolerance to growth in the shade, the size of the existing plant community, the composition of plant species present, and the proximity of seed sources (Newmann and Sanford 1987). This approach has a direct application to archaeological investigations at the John Henry Site, augmenting both the archival research and the archaeological field investigations. Assessment of the natural setting provides a persistent, living link between past agricultural and domestic activities, historical references, historical maps, and the physical site as it exists in the present. Appraisal of a site's natural setting helps to target high probability areas for archaeological testing, and strengthens the archaeological research design by providing a critical baseline environmental context.

Evaluation of the environmental setting of the John Henry Site began with a survey of the entire project area on May 12, 1997. This landscape reconnaissance included an examination of topographic features, land relief, and wetlands configuration on historical maps and recent maps from the United States Geological Survey (USGS). In addition to the physical aspects of the local landscape, a detailed survey was made of the biological community of the site. This survey included a comprehensive assessment of plant taxa represented throughout the project area. Particular emphasis was placed on (1) the age and species composition of various vegetational communities to help to establish the successional nature and duration of these plant populations with regard to the history of land use at the site; and (2) cultural signatures persisting in the extant landscape (i.e., apple trees and daffodils). Forest cover type descriptions are based on criteria defined by Eyre (1980) and Ford-Robertson (1971). The measurement of tree species encountered is given in centimeters in diameter at breast height (cmbd). The approximate age and character of vegetative cover and key botanical features are provided below. Both common and scientific names of plant species encountered are included in this report to ensure clarity.

3. *Survey Results*

Survey of the John Henry Site revealed four distinct vegetative or land-use zones (Figure 6). These zones, described as Loci I, II, III, and IV show a history of intensive domestic and agricultural use, with human activities utilizing 100 percent of the project area. Locus I was the house perimeter and the adjacent landscape, Locus II was the rear yard of house, Locus III was the wooded wetland area, and Locus IV was the wooded uplands. The vegetative composition and key landscape features of these are as follows:

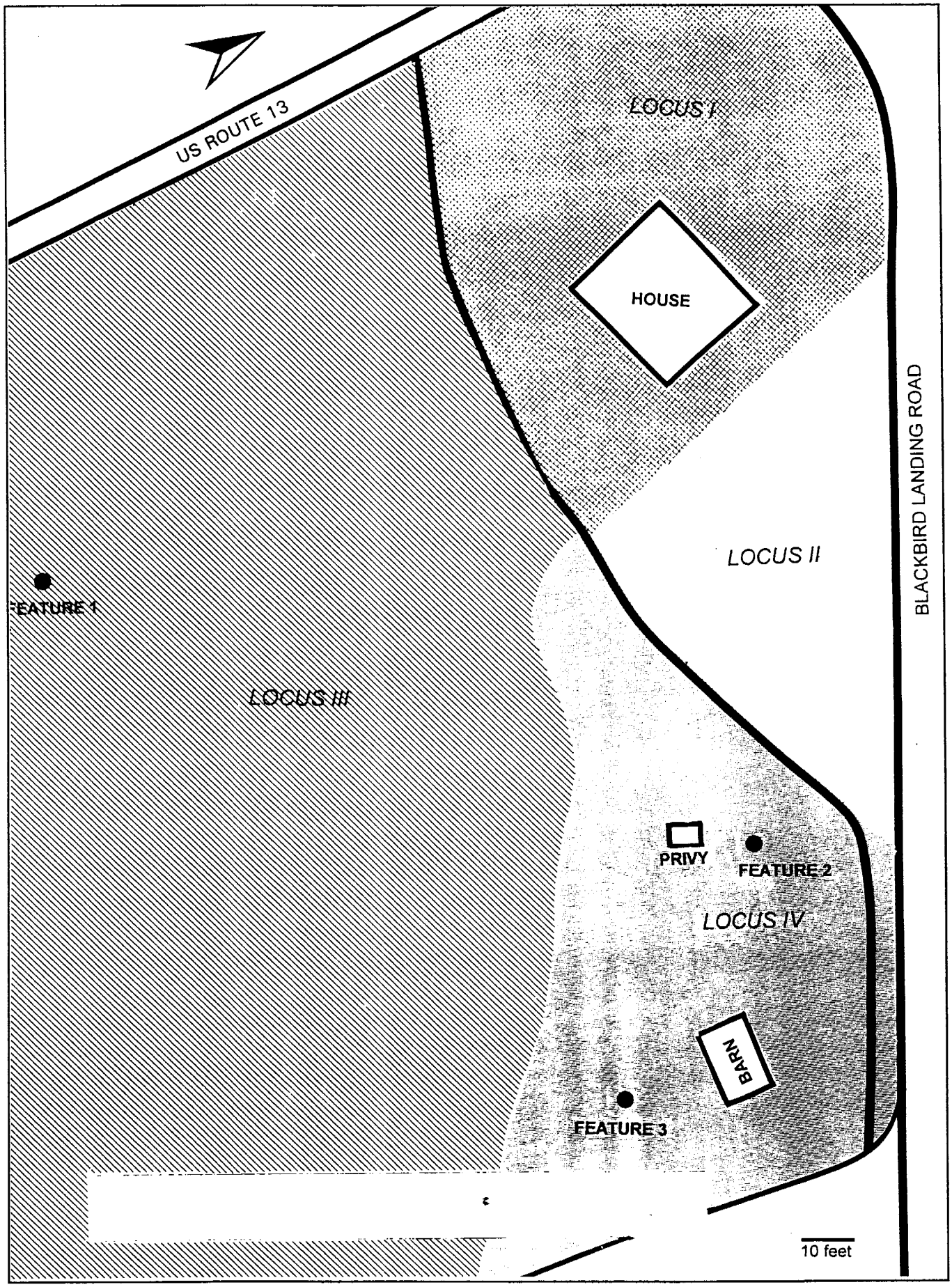

FIGURE 6: Plan of the Landscape at the John Henry Site

LOCUS I. An array of culturally significant plant taxa were identified in close proximity to the John Henry House. Mature shade trees flanked the western limits of the home lot and the southern edge of Locus I. Tree species identified included Norway maple (*Acer platanoides*), red maple (*Acer rubrum*), silver maple (*Acer saccharinum*), and eastern red cedar (*Juniperus virginiana*). The western edge of the project area supported trees averaging 35-45 years in age. Propagation of these specimens undoubtedly occurred after the relocation of the dwelling across the road from its original location around 1920. The oldest trees identified within the subject property occurred on the west side of the abandoned driveway. Examination of a red maple tree in this area revealed an open growth pattern indicative of development in an open setting (i.e., pasture, maintained yard). This specimen dated to the early twentieth century, and pre-dated the relocation of the house. Once-cultivated shrubs persisted in the landscape on all sides of the standing structure. Lilac (*Syringa* sp.), rose of sharon (*Hibiscus syriacus*), viburnum (*Viburnum* sp.), spirea (*Spirea* sp.), and roses (*Rosa* sp.) revealed that the late historic occupants of the John Henry House had had an aesthetic sense, and surplus capital (at least in the form of land) to expend on ornament. Herbaceous ornamental plants including mullein pink (*Lychnis coronaria*), Spanish bayonet (*Yucca filamentosa*), sedum (*Sedum* sp.), and daffodil (*Narcissus pseudo-narcissus*) had also naturalized around the houselot.

Vegetation mapped within Locus I dated to after the relocation of the structure, around 1920, and indicated that this area had long functioned as a houselot. Persistent ornamental plants were concentrated on the western side of the house, and along the abandoned driveway. This arrangement indicated that the twentieth-century landscape at John Henry House had been designed and maintained to maximize the appearance of the public facade of the site. Unfortunately, the vegetation extant in Locus I revealed little regarding the late nineteenth- and early twentieth-century landscape of the site. Relocation of the John Henry House structure, and twentieth-century road modifications, had effectively erased any earlier cultural signatures from the vegetative landscape. It has been asserted that an emphasis on ornament and public view is unusual among House and Garden sites in Central Delaware, and it is probable that earlier residents of the site did not maintain the same level of ornament as twentieth-century tenants.

LOCUS II. The rear yard of the house was an open area dominated by weedy herbaceous cover maintained through periodic mowing. Species mapped for this area included a mixture of native and invasive ruderal species including dandelion (*Taraxacum officinale*), henbit (*Lamium amplexicaule*), horsemint (*Monarda punctata*), English plantain (*Plantago virginica*), knotweed (*Polygonum* sp.), dock (*Rumex crispus*), wild onion (*Allium vineale*), clover (*Trifolium* sp.), and chickweed (*Stellaria media*). The wooded edges of Locus II were dominated by red maple trees (*Acer rubrum*), with Virginia creeper (*Parthenocissus quinquefolia*) and honeysuckle (*Lonicera japonica*). Persistent culturally significant vegetation included feral blackberries (*Rubus flagellaris*) and rose (*Rosa* sp.).

Maintenance of Locus II in open-field vegetation had limited natural vegetation series from developing, and prevented interpretation of historic land use based on survey results. It is likely that the rear yard of John Henry Site had long served as an intensively utilized activity area for domestic and agricultural activities at the site. The location of this loci between the domestic and

horticultural/agricultural centers of the property pointed to its probable use as a processing area for farm products, and an open-air work area for domestic activities such as laundering. The level topography and drier soils characterizing Locus II would also have supported its function as a vegetable garden.

LOCUS III. This probable Delmarva Bay remnant is characterized by moisture-tolerant forest cover and a moderate understory. Forest cover in this area was dominated by red maple (*Acer rubrum*) and sweet gum (*Liquidambar styraciflua*) (Ferguson 1959) with an average age of 35 years. Extant herbaceous taxa indicative of wetland setting included jewel weed (*Impatiens pallida*) and various water-tolerant grasses (Gramineae). The northern edge of Locus III flanked the northbound lane of U.S. Route 13 and the open edge supported a distinct plant community dominated by lush field-edge vegetation, including sassafras (*Sassafras albidum*), blackberry (*Rubus* sp.), maples (*Acer* sp.), honeysuckle (*Lonicera japonica*), poison ivy (*Rhus radicans*), and trumpet creeper (*Campis radicans*). The large structural timber which persisted on the western periphery of Locus III and the project area might reveal the use of the area for agricultural activities.

House and Garden occupants maximized the productive potential of the environmental resources at hand, maintaining an intensive self-sufficiency by raising livestock, poultry, and vegetable and fruit crops on very limited ground. The highly altered natural state of Locus III, the persistence of agriculturally related architectural features, and its proximity to other activity areas at the site support the hypothesis that this zone was used as a livestock paddock for swine or cattle. Throughout the Delmarva Peninsula, it was common practice to keep livestock (especially pigs) in the otherwise "useless" wetland areas.

It was evident that Locus III had endured considerable alteration during recent times as a result of road construction and maintenance. These activities undoubtedly affected the historically imposed artificial drainage systems which may have made this land more employable to the residents of the site.

LOCUS IV. Survey of vegetation and landscape features within Locus IV revealed that this densely wooded area of the site served as the agricultural center of operations. Key cultural signatures within this locus included persistent apple trees (*Pyrus malus*), a grove of black locust (*Robinia pseudoacacia*), possible gate posts, and sprouted black locust fence posts in association with other standing and truncated fence posts. Forest cover in this area was dominated by sweet gum (*Liquidambar styraciflua*), black locust (*Robinia pseudoacacia*), wild cherry (*Prunus serotina*), and red mulberry (*Morus rubra*). All of these species are common successional forest vegetation over abandoned agricultural land. The general forest cover of Locus IV averaged 35 to 40 years in age. Additional cultural signatures within the landscape of Locus IV included rose of sharon (*Hibiscus syriacus*), rose (*Rosa* sp.), soapwort (*Saponaria officinalis*), and a line of deciduous tree stumps along Blackbird Landing Road. Structural remains of a barn and privy were also encountered.

Table 2 is a key to vegetation loci and lanscape features.

TABLE 2 KEY TO VEGETATION LOCI AND LANDSCAPE FEATURES JOHN HENRY HOUSE SITE (7NC-J-223)

LOCUS I: House perimeter and adjacent landscape		
Naturalized Perennials		These persistent perennials relate directly to the historic landscape of the site.
	Spanish bayonet/yucca *(Yucca filamentosa)*	Yucca flanks the northwestern periphery of Locus I and the project area. This species has been cultivated in the eastern states since the nineteenth century and often escapes to old fields, home sites, roadsides—especially in sandy soil (Brown and Brown 1984:341).
	Mullein pink/campion *(Lychnis coronaria)*	A scattered crop of mullein pink has naturalized in the front of the standing structure. This nineteenth- and early twentieth-century garden favorite (Leighton 1987:338) often persists in abandoned domestic settings (Brown and Brown 1984:449).
	Daffodil *(Narcissus pseudo-narcissus)*	A common cultural signature on abandoned historic sites, daffodils are widely naturalized across Locus I.
	Sedum *(Sedum sp.)*	Cultivated variety has naturalized around foundation of standing structure.
Persistent Woody Taxa		Trees, shrubs, and vines enduring in the landscape from historic occupation of Henry House.
	Rose of Sharon *(Hibiscus syriacus)*	This species, introduced before 1790 (Wyman 1969), has been a garden favorite for centuries. The deciduous shrub naturalizes easily and occurs along the Loci I and III interface at the woods edge.
	Lilac *(Syringa sp.)*	Lilac persists along the Rte. 13 frontage of Locus I, and occurs at the gatepost of abandoned driveway. According to Leighton (1987:363-364) many varieties were common in American gardens during the nineteenth century.
	Norway maple *(Acer platanoides)*	Specimens identified along northwest periphery of Locus I and the project area to 20-30 cmdbh. Native across Europe, the Norway maple has been widely planted across the United States. Fast growing, tolerant to smoke and dust.
	Grape *(Vitis sp.)*	Unidentifiable grape varieties naturalized in home lot.
	Viburnum *(Viburnum sp.)*	Viburnum was identified persisting along north side of standing structure. Viburnums were popular shrubs in nineteenth-century gardens (Leighton 1987:364-365), and many varieties were propagated and available.
	Spirea *(Spirea sp.)*	A single, standard spirea endures on the south side of standing structure. These flowery shrubs were popular in nineteenth-century gardens, and many different varieties were available for the home gardener (Leighton 1987:362-363).

TABLE 2 (Continued)

	Eastern red cedar *(Juniperus virginiana)*	Eastern red cedar is renowned for its attractive color, durability, and excellent working qualities. Cedar also possesses a pungent fragrance and reputed insect-repelling properties (Panshin and deZeeuw 1970:499-500). The wood is extremely durable, and historically was the principle taxon for fenceposts and pole-built structures due to its enduring quality in the ground. The lumber has been used in the construction of wardrobes, chests, and closet linings, and for interior finish millwork, doors, and window sashes. Specimens to 25 cmdbh were observed within Locus I.
	Red maple *(Acer rubrum)*	Red maples to 80 cmdbh flank the southern edge of abandoned drive within Locus I. Red maples are native to the forests of New Castle County, Delaware (Tatnall 1946), but have also been highly regarded as ornamental trees since colonial times, popular for their wood, sap, blossoms, and autumn coloring. The wood of the red maple had historic application in the manufacturing of furniture, boxes, crates, wall paneling, and food containers (Panshin and deZeeuw 1970:607).
	Rose *(Rosa sp.)*	A variety of indistinguishable roses flank the southern side of abandoned driveway.
	Climbing rose *(Rosa sp.)*	Old-fashioned climbing rose flanks the entrance to abandoned driveway, growing around gatepost. Variety not distinguishable.
	Silver maple *(Acer saccharinum)*	Silver maples trees grow along south side of abandoned drive. This native species is commonly used as a landscape feature. Specimens identified measure to 25 cmdbh. Silver maple lumber is employed for a variety of construction uses.
Invasive Weedy Annuals		These species quickly colonize abandoned ground, waste places.
	Buttercup *(Ranunculus sp.)*	Buttercup species are common throughout open, sun-exposed areas of Locus I. Mature fruits needed for species identification unavailable at time of survey.
	Grasses, various *(GRAMINEAE)*	Various native and non-native grasses were identified throughout Locus I.
	Sedges, various *(CYPERACEAE)*	A variety of sedges were identified throughout open, sunny areas of Locus I.
	Henbit *(Lamium amplexicaule)*	Common throughout.
	Japanese knotweed *(Polygonum cuspidatum)*	This highly invasive non-native species (Brown and Brown 1984:406) is well established on the southwest side of abandoned driveway.
	Horsemint *(Monarda punctata)*	Common to shady areas of Locus I.

TABLE 2 (Continued)

	Common milkweed *(Asclepias syriaca)*	This most common milkweed species is an early colonizer of abandoned fields and waste places. Seeds wind dispersed, facilitating the spread of the species. Poisonous to livestock if eaten (Brown and Brown 1984:752).
	Dandelion *(Taraxacum officinale)*	This ubiquitous weed is also one of the most useful of all European herbs. Greens and roots can be eaten as a potherb, or fresh as a salad green; roots provide a coffee substitute; all parts can be used in the production of fermented beverages. Medicinal uses include application as an effective diuretic and to treat liver ailments (Stuart 1987:270). Occurs throughout open areas of Locus 1.
Hardy/Invasive Woody Species		These plants constitute an early successional vegetation stage in the open landscape of Locus I.
	Poison ivy *(Rhus radians)*	Common throughout.
	Honeysuckle *(Lonicera japonica)*	The species was first imported from Asia as an ornamental, which became a widely planted and popular landscaping plant in the nineteenth-century domestic landscape (Downing 1847, 1859). Honeysuckle has been common intruder to the natural landscape since 1900 (Brown and Brown 1972:304).
	Red maple *(Acer rubrum)*	Saplings common. Red maples are native to the forests of New Castle County, Delaware (Tatnall 1946), but have also been highly regarded as ornamental trees since colonial times, popular for their wood, sap, blossoms, and autumn coloring. The wood of the red maple had historic application in the manufacturing of furniture, boxes, crates, wall paneling, and food containers (Panshin and deZeeuw 1970:607).
	Trumpet creeper *(Campis radians)*	This native trumpet creeper is a tenacious vine growing thick on the southwest side of abandoned driveway. Scott extolls the beauty of the scarlet trumpet flowers to the nineteenth-century horticultural landscape, and recommends them as a "superb vine to grow on old evergreen trees" (Scott 1879:249).
	Staghorn sumac *(Rhus typhina)*	This common old field species is well established on the sunny northernmost limits of Locus I.
	Devils walkingstick *(Aralia spinosa)*	Dominates the northern limits of Locus I and the project area. A common colonizer of open waste places and barren ground (Brown and Brown 1972:239).
	Common greenbriar (Smilax rotundifolia)	Common throughout.
	Norway maple *(Acer platanoides)*	Pioneer specimens propagated from large Norway maples described above. Saplings and young trees measure <10 cmdbh.

TABLE 2 (Continued)

	Tulip poplar *(Liriodendron tulipifera)*	Pioneer specimens measuring <10 cmdbh.
Architectural/Agricultural Remnants		
	Henry House	Standing structure.
LOCUS II: Rear yard of house—open landscape		
Herbaceous Cover		
	Various grasses *(GRAMINEAE)*	Various grasses dominate the open areas of Locus II.
	Japanese knotweed *(Polygonum cuspidatum)*	A dense thicket of Japanese knotweed dominates the forest edge and understory along southern side of abandoned driveway. This species has recently become naturalized throughout the Coastal Plain, and is extremely invasive.
	Dandelion *(Taraxacum officinale)*	This ubiquitous weed is also one of the most useful of all European herbs. Greens and roots can be eaten as a potherb, or fresh as a salad green; roots provide a coffee substitute; all parts can be used in the production of fermented beverages. Medicinal uses include application as an effective diuretic and to treat liver ailments (Stuart 1987:270). Common throughout Locus II.
	Henbit *(Lamium amplexicaule)*	Common weed species throughout Locus II.
	Horsemint *(Monarda punctata)*	This weed species is common throughout Locus II.
	English plantain *(Plantago virginica)*	This is a prevalent species over all open areas of Locus II. English plantain was naturalized from Europe and now one of our most troublesome weeds in lawns, meadows, and pastures.
	Knotweed *(Polygonum aviculare)*	This weedy annual is prevalent throughout open areas of Locus II.
	Daisy family *(COMPOSITAE)*	Various members of this family common throughout.
	Curled dock *(Rumex crispus)*	Common throughout. This naturalized alien perennial is a troublesome weed in grain fields, meadows, and lawns (Brown and Brown 1984:399). Historically, the species had many uses: As a dyeplant; medicinally as a purgative, cholagogue, tonic, and astringent; and edible when the young leaves are boiled as a potherb (Stuart 1987: 256).
	Wild onion *(Allium vineale)*	Naturalized from Europe: common weed to forests, fields, meadows, and pastures. Gives unpalatable flavor to milk if eaten by cows.

TABLE 2 (Continued)

	Buttercup *(Ranunculus sp.)*	Common throughout sunny, open areas of Locus II. Mature fruits are needed for species identification, and were unavailable at time of survey.
	Various knotweeds *(Polygonum sp.)*	Common throughout forest margins and open areas of Locus II.
	Clover, various *(Trifolium sp.)*	Clover common throughout open, sunny areas of Locus II.
	Chickweed *(Stellaria media)*	This vigorous annual is common throughout the loci. The species was historically used as chicken feed or forage, and used as a salad herb or cooked vegetable. Medicinal applications developed in the southern United States after 1828, specifically as an expectorant, emetic, purgative, laxative, and sialogogue (Stuart 1987:267).
Colonizing Woody Taxa		
	Red maple *(Acer rubrum)*	Red maples to 30 cmdbh occur at the periphery of Locus II. Red maples are native to the forests of New Castle County, Delaware (Tatnall 1946), but have also been highly regarded as ornamental trees since colonial times, popular for their wood, sap, blossoms, and autumn coloring. The wood of the red maple had historic application in the manufacturing of furniture, boxes, crates, wall paneling, and food containers (Panshin and deZeeuw 1970:607).
	Virginia creeper *(Parthenocissus quinquefolia)*	This native vine was highly acclaimed as an ornamental in the nineteenth century (Emerson 1887; Henderson1887). Occurs throughout Locus II.
	Honeysuckle *(Lonicera japonica)*	The species was first imported from Asia as an ornamental, which became a widely planted and popular landscaping plant in the nineteenth-century domestic landscape (Downing 1847, 1859). Honeysuckle has been common intruder to the natural landscape since 1900 (Brown and Brown 1972:304).
Persistent cultural vegetation		The following plants persist from the historic landscape of the site.
	Blackberry *(Rubus flagellaris)*	Common across Locus II.
	Rose *(Rosa sp.)*	Various rose species persist across Locus II. Varieties not distinguishable.
LOCUS III: Wooded wetlands—frequently inundated area		
Woody species		General forest cover of the area, including understory, shrubs, and vines.

TABLE 2 (Continued)

	Box elder *(Acer negundo)*	Tolerant of wet soils, box elder are native deciduous trees with little economic value (Brown and Brown 1972:216-217). Common throughout Locus III in forest canopy and as an understory in open areas.
	Poison ivy *(Rhus radians)*	Common throughout.
	Red maple *(Acer rubrum)*	Red maples dominate the woodland. Specimens to 30 cmdbh; saplings colonizing Rte. 13 (northbound) forest edge. Red maples are native to the forests of New Castle County, Delaware (Tatnall 1946), but have also been highly regarded as ornamental trees since colonial times, popular for their wood, sap, blossoms, and autumn coloring. The wood of the red maple had historic application in the manufacturing of furniture, boxes, crates, wall paneling, and food containers (Panshin and deZeeuw 1970:607).
	Silver maple *(Acer saccharinum)*	Silver maples are common throughout Locus III, measuring to 25 cmdbh. This native species is commonly used as a landscape feature. Silver maple lumber is employed for a variety of construction uses (Panshin and deZeeuw 1970:605-607).
	Viburnum *(Viburnum sp.)*	Understory taxa common throughout Locus III.
	Black locust *(Robinia pseudoacacia)*	Historically, this medium-sized leguminous tree had a variety of important uses for agriculture. The wood is unsurpassed for fenceposts, as it resists rot in contact with the ground. Locust wood was also used to manufacture durable tools and tool handles. The wood of the locust tree is hard, strong, very durable and makes excellent fuel. The tree produces edible flowers in April, and the ensuing young pods are also edible. Medsger (1966:121) states that the seeds of the black locust were gathered and cooked (like peas or beans) by Native Americans. Specimens observed to 25 cmdbh.
	Sweet gum *(Liquidambar styraciflua)*	Sweetgums are a dominant forest tree within Locus III, growing to 35 cmdbh. These moisture tolerant trees thrive in wetland conditions.
	Norway maple *(Acer platanoides)*	Trees measuring to 25 cmdbh. Native across Europe, the Norway maple has been widely planted across the United States. Fast growing, tolerant to smoke and dust.
	Fox grape *(Vitis lambrusca)*	This native wild grape is common throughout Locus III.
	Honeysuckle *(Lonicera japonica)*	Naturalized since 1900 (Brown and Brown 1972:304), the species was first imported from Asia in as an ornamental, which became a widely planted and popular landscaping plant in the nineteenth-century domestic landscape (Downing 1847, 1859).

TABLE 2 (Continued)

	Trumpet creeper *(Campis radians)*	Dominates forest fringe along Rte. 13 (northbound). This native trumpet creeper is a tenacious vine. Scott extolls the beauty of the scarlet trumpet flowers to the nineteenth-century horticultural landscape, and recommends them as a "superb vine to grow on old evergreen trees" (Scott 1870:249).
	Wild cherry *(Prunus serotina)*	Young cherry trees occupy the forest fringe along Rte. 13 (northbound).
	Sassafras *(Sassafras albidum)*	Saplings common along Rte. 13 (northbound) wood edge.
	Blackberries *(Rubus sp.)*	Frequent throughout where sunlight penetrates, especially along forest edge at Rte. 13.
	Virginia creeper *(Parthenocissus quinquefolia)*	This native vine was highly acclaimed as an ornamental in the nineteenth century (Emerson 1887; Henderson1887). Common along open edges of Locus III.
	Eastern red cedar *(Juniperus virginiana)*	Eastern red cedar trees are fairly common within Locus III. Eastern red cedar is renowned for its attractive color, durability, and excellent working qualities. Cedar also possesses a pungent fragrance and reputed insect-repelling properties (Panshin and deZeeuw 1970:499-500). The wood is extremely durable, and historically was the principle taxon fenceposts and pole-built structures due to its enduring quality in the ground. The lumber has been used in the construction of wardrobes, chests, and closet linings, and for interior finish millwork, doors, and window sashes.
Herbaceous vegetation		
	Japanese knotweed *(Polygonum cuspidatum)*	Spreading south from southwest side of abandoned driveway (Locus I)
	Peppermint *(Mentha piperita)*	Common to wet areas (ditch) of forest fringe along Rte. 13 (northbound).
	Various grasses *(GRAMINEAE)*	Various native and exotic grass species occur throughout Locus III.
	Jewel weed *(Impatiens pallida)*	A common plant to moist creek banks and wetland forests, jewel weed is a prevalent species throughout Locus III.
	Poke *(Phytolacca americana)*	Common throughout loci where sun is available. This common perennial herb is native to North America with numerous medicinal, dye and food uses. Historically used as an emetic and as a remedy for venereal disease. The young shoots can be boiled as a vegetable. Colorant made from the berries. Mature plant is toxic and should be handled with care. (Stuart 1987:237-238).

TABLE 2 (Continued)

Architectural/Agricultural Remnants		
Fea. 1	Vertical structural post with treenails	A single, isolated structural member persists at the southern limits of Locus III and the project area. Analysis of wood fibers from the post identify it as American chestnut *(Castanea dentata)*, historically an important and favored wood for post and timber frame construction (Panshin and deZeeuw 1970:559-561).
LOCUS IV: Wooded "uplands"		
Woody Vegetation		Including dominant forest cover, understory, and vining plants.
	Black locust *(Robinia pseudoacacia)*	Measuring 15-45 cmdbh, a distinct grove of black locust trees dominate central portion of Locus IV—undoubtedly the result of sprouting of locust fenceposts, and ensuing natural propagation. Larger (30-45 cmdbh) black locusts dying out.
	Sweet gum *(Liquidambar styraciflua)*	To 35 cmdbh. A dominant cover tree around the southern periphery of Locus IV.
	Wild cherry *(Prunus serotina)*	A community of large wild cherries (to 50 cmdbh) flank the western limits of Locus IV along periphery of the project area. These mature specimens reflect development in crowded forest conditions rather than open field habit.
	Apple *(Pyrus malus)*	Two domestic apple trees persist, measuring 20 and 30 cmdbh. These trees are open and spreading in habit, and suggest their development in an open setting. Varieties not distinguishable.
	Rose *(Rosa sp.)*	Various cultivated rose species remnants persists on the periphery of Locus IV. Varieties not distinguishable.
	Rose of Sharon *(Hibiscus syriacus)*	This species, introduced before 1790 (Wyman 1969), has been a garden favorite for centuries. The deciduous shrub naturalizes easily and occurs within Locus IV at the woods edge.
	Red maple *(Acer rubrum)*	Maples are a dominant tree species along the interface with Locus III where soils are moist and elevations lower. Trees to 30 cmdbh. Red maples are native to the forests of New Castle County, Delaware (Tatnall 1946), but have also been highly regarded as ornamental trees since colonial times, popular for their wood, sap, blossoms, and autumn coloring. The wood of the red maple had historic application in the manufacturing of furniture, boxes, crates, wall paneling, and food containers (Panshin and deZeeuw 1970:607).
	Fox grape *(Vitis lambrusca)*	Fox grape is common along the edges of Locus IV where sun exposure is adequate. Vines estimated to 20 years old.
	Poison ivy *(Rhus radians)*	Poison ivy is prevalent along open edges of Locus IV (especially the northern periphery), and scattered moderately throughout.

TABLE 2 (Continued)

	Multiflora rose *(Rosa multiflora)*	This widely naturalized Eurasian species is common along Blackbird Landing Road at the periphery of Locus IV. Multiflora rose was first imported as a root stock for grafting cultivated roses; these often sprout below the graft, replacing the cultivated variety (Brown and Brown 1972:170), and may represent a "feral" cultural signature from past horticultural activities at Henry House.
	Blackberry/raspberry *(Rubus sp.)*	Berry thickets predominate the edge of Locus IV along Blackbird Landing Road. These plants may represent enduring feral specimens, or wild brambles propagated by songbirds.
	Red mulberry *(Morus rubra)*	Mulberry seedlings identified along Blackbird Landing Road. Mature trees bear an edible multiple fruit which ripens in late June. The fruits are tasty and useful in jams, jellies, preserves, and pies. In the absence of mature trees in the project area, these specimens may represent newcomers to the landscape—recently propagated by birds.
	Honeysuckle *(Lonicera japonica)*	Honeysuckle is common throughout the exposed "edge" regions of Locus IV. The species was first imported from Asia in as an ornamental, which became a widely planted and popular landscaping plant in the nineteenth-century domestic landscape (Downing 1847, 1859). Honeysuckle has naturalized since 1900 (Brown and Brown 1972:304),
	Deciduous stumps	Large (to 80 cm in diameter) tree stumps are evident along the wooded edge flanking Blackbird Landing Road. These trees may have been recently cleared by road maintenance or power maintenance operations. The specimens may evidence a former wooded buffer to agricultural areas of the site.
Herbaceous cover		Ruderal and useful species identified.
	Mustards, various *(Brassica sp.)*	Varieties of this weedy annual are common throughout the open edge of Locus IV. Wild mustards (especially field mustard and black mustard *(B. rapa and B. nigra)*) provide edible field greens, and the seeds may be ground for use as table mustard.
	Vetch *(Vicia sp.)*	Multiple species identified along open edge of Locus IV. Vetch is planted as a forage crop for livestock.
	Grasses, various *(GRAMINEAE)*	Various grasses form the maintained margin along Blackbird Landing Road at the periphery of Locus IV.
	English plantain *(Polygonum lanceolata)*	This is a prevalent species over all open areas of Locus IV. English plantain was naturalized from Europe and now one of our most troublesome weeds in lawns, meadows, and pastures.

TABLE 2 (Continued)

	Soapwort, bouncing bet *(Saponaria officinalis)*	This perennial herb is common along the open edge of Locus IV at Blackbird Landing Road. Soapwort has long been used as a natural soap (its cleaning properties are due to the presence of saponins in the plant). The astringent lather that the plant produces is particularly suitable for cleaning woolen fabric (Stuart 1987:260).
	Wild onion *(Allium vineale)*	Naturalized from Europe, common weed to forests, fields, meadows, and pastures. Gives unpalatable flavor to milk if eaten by cows.
	Dandelion *(Taraxacum officinale)*	This ubiquitous weed is also one of the most useful of all European herbs. Greens and roots can be eaten as a potherb, or fresh as a salad green; roots provide a coffee substitute; all parts can be used in the production of fermented beverages. Medicinal uses include application as an effective diuretic and to treat liver ailments (Stuart 1987:270). Common throughout Locus IV.
Architectural/Agricultural Remnants		
Fea. 2	gate/fenceposts persist	Two fenceposts endure near the wooded edge of Locus IV. Analysis of fibers from these posts identifies them as black locust *(Robinia pseudoacacia)*; historically a preferred tree for fashioning fenceposts due to its durability, strength, and resistance to rot (Panshin and deZeeuw 1970: 598-600).
Fea. 3	sprouted fenceposts/ fenceposts	A line of sprouted fenceposts, standing and truncated posts persist through the southeastern portion of Locus IV in a roughly north/south arrangement.
	Barn	Collapsed agricultural building "barn" located in southern portion of Locus IV.
	Privy	Structural remnants of collapsed privy located in central portion of Locus IV.

B. SOIL FLOTATION

Archaeobotanical investigations were undertaken at the John Henry Site in order to enhance the identification of site function, better understand local subsistence activities, augment reconstruction of the historic landscape, and advance an understanding of the swiftly changing plantation landscape generally and the unique House and Garden culture in particular. Current archaeobotanical investigations at the John Henry Site were designed using a two-phase approach, which began with the field collection, processing, and preliminary assessment of recovered macrobotanical remains from representative cultural contexts at the site. Processing of the complete collection was reserved for possible future work.

The great majority of plant remains deposited at a site decompose quickly, leaving a limited and biased sample of the original vegetative material. This bias is due both to the cultural factors involved in deposition and to the physical factors governing the differential preservation of plants and plant parts deposited (Pearsall 1989). Although the full range of plant remains originally deposited is not accurately represented in the small complement of botanical remains recovered through flotation, significant results can nevertheless be obtained through careful field sampling, adequate flotation processing and analysis, and judicious interpretation of the resulting archaeobotanical data. Where the remains of wild and cultivated food plants from the historic landscape endure, significant dietary reconstruction can be realized through careful interpretation of data obtained through archaeobotanical analysis. An understanding of historic textile manufacturing, medicinal practices, building material selection, and firewood preference is augmented through analysis of archaeobotanical assemblages. Wood remains can also be helpful in exploring past environmental disturbance, and to assist in landscape reconstruction for the period of site occupation.

1. Methodology

During field excavations at the John Henry Site, macrobotanical samples were systematically collected through routine soil sampling. Soil samples were collected from all culture-bearing strata encountered. Soil samples of a standard volume (measuring 2 liters) were retained. Thirty-six soil samples totaling 72 liters were collected. Of these, 10 representative samples from across the site were selected for flotation processing and analysis based on their potential for yielding a representative sample of plant macrofossils enduring at the site (their composition, condition, and frequency). The cultural fill analyzed thus totaled 20 liters.

Soil samples were individually processed using a modified Shell Mound Archaeological Project (SMAP) flotation system (Watson 1976) equipped with 0.30-millimeter fine fraction and 1.6-millimeter coarse fraction screens. The SMAP flotation system facilitates the separation and recovery of organic remains from the soil matrix via agitation in water. Processing results in two fractions of material (heavy and light). Floated portions were air-dried. In order to establish the recovery rate of macrobotanical remains from the John Henry Site using this particular flotation system, the standard poppy seed test (Wagner 1982) was applied. Poppy seeds (*Papaver somniferum*), in measured lots of 50, were added to three of the 10 selected flotation samples

prior to processing. Recovery rates averaged 84 percent. No contamination was observed between samples, and little damage to the poppy seeds was noted.

The heavy flotation fraction contained a great variety of cultural artifacts and geologic material, including woody root fibers (modern), coal and coal clinker, degraded rubber insulation, bottle glass, mammal bone and tooth fragments, and iron hardware. Sample matrices were consistently composed of heavy clay and/or quartzitic gravel. All archaeologically derived plant remains recovered through flotation were combined and passed through a 2-millimeter geological sieve, yielding fractions of two different sizes for analysis. Weights and sample descriptions of the resulting fractions greater than or equal to 2-millimeters and less than 2-millimeters in size were recorded. The charcoal specimens greater than or equal to 2 millimeters were examined under low magnification (10X to 30X) and sorted into general categories of material (i.e., wood, seeds, amorphous charcoal, etc.). Description, count, and weight were recorded for each category of material greater than or equal to 2 millimeters. The fractions less than 2 millimeters in size were examined under low magnification; their general description was recorded and any remains of seeds or cultivated plants were noted.

In order to establish the "general composition" of the John Henry Site samples, identifications were attempted on all seed remains encountered, and on a systematically selected sample of two fragments per flotation sample of wood remains encountered. Identifications of all classes of botanical remains were made to the genus level when possible, to the family level when limited diagnostic morphology was available, and to the species level only when the assignment could be made with absolute certainty. When botanical specimens were found to be in such eroded or fragmentary condition as to prevent their complete examination or recognition, standard general categories were assigned to reflect the degree of identification possible (Pearsall 1989): The general wood category "deciduous taxa" was applied where specimens could be identified as having a porous vessel arrangement reflecting deciduous taxa rather than a trachid arrangement indicative of coniferous taxa; and "unidentifiable" where specimens were so fragmentary or minute that no clear section could be obtained upon which to base an identification. The category "amorphous charcoal" was used in this report to classify carbonized remains which lacked any suitable characteristics whatsoever upon which to base identification.

All identifications are routinely made under low magnification (10X to 30X) with the aid of standard texts (Kozlowski 1972; Martin and Barkely 1961; Panshin and deZeeuw 1970), and are checked against plant specimens from a modern reference collection germane to the flora of New Castle County, Delaware (Ferguson 1959; Tatnall 1946). Specimen weights were taken using an electronic balance accurate to 0.01 grams.

2. *Results of Preliminary Analysis*

Few plant macrofossils were recovered from the John Henry Site. Flotation processing of 20 liters of soil from cultural contexts yielded 4.24 grams of plant remains, or an average density of 0.21 grams of archaeological plant material per liter of cultural fill analyzed. This low overall density of macrofloral remains may be partially explained by the absence of samples from cultural features (which often yield higher densities of plant macro remains).

Although quantitatively limited, the archaeobotanical assemblage from the John Henry Site reflects the use of a variety of plant species by the nineteenth- and early twentieth-century inhabitants of the site, and provides insight into the local vegetative landscape during this period of occupation. Plant remains recovered represent deciduous trees; wild and/or cultivated fruit representing a variety of useful herbaceous and woody plants; rind fragments; and miscellaneous plant materials including fungal fructifications and unidentifiable amorphous charcoal.

Carbonized wood remains were not abundant within the examined samples. Wood charcoal comprised 36 percent (by weight) of the site sample. A total of 342 wood fragments weighing 1.52 grams was recovered. Identification of two wood fragments randomly selected from each flotation sample revealed the presence of maple (*Acer* sp.), hickory (*Carya* sp.), red, white, and unspecified oak species (*Quercus* sp.), American chestnut (*Castanea dentata*), and black locust (*Robina pseudoacacia*). All of these arboreal species are consistent with the historic forest cover of New Castle County, Delaware (Brown et al. 1986; Ferguson 1959; Tatnall 1946).

Recovered seed remains were both abundant and ubiquitous. However, all seeds recovered were noncarbonized, a condition which raises some question of the archaeological integrity of the specimens (Minnis 1981; Pearsall 1989). The recovery of modern seeds is often used as an indicator of sample contamination, possibly indicating the vertical dispersion of modern seeds via rodent or insect burrowing, root action, plowing, or down-washing (Keepax 1977; Minnis 1981; Smith 1985). For the purposes of this preliminary report, these noncarbonized seed remains are presented for consideration within the archaeological contexts in which they were recovered. The seed remains recovered represent a range of useful and ruderal plants, including maple (*Acer* sp.), red maple (*Acer rubrum*), Virginia three-seeded mercury (*Acalypha virginica*), pigweed (*Amaranthus* sp.), goosefoot (*Chenopodium* sp.), rattlebox (*Crotalaria sagittalis*), goosegrass (*Eleusine indica*), spurge (*Euphorbia* sp.), carpet-weed (*Mollugo verticillata*), oxalis (*Oxalis stricta*), poke (*Phytolacca americana*), knotweed (*Polygonum aviculare* and *P.* sp), purselane (*Portulaca oleracea*), raspberry/blackberry (*Rubus* sp.), dock (*Rumex* sp.), elderberry (*Sambucus canadensis*), grape (*Vitis* sp.), and members of the chenopod (Chenopodiaceae), grass (Gramineae), and nightshade (Solanaceae) families.

Miscellaneous archaeobotanical materials identified within the John Henry Site assemblage included maple achene fragments, unidentifiable rind fragments, amorphous charcoal fragments, and a single fungal fructification.

3. Discussion

The pattern of plant remains revealed during this preliminary analysis provides only limited information as to the nature and scope of human-plant interactions at the John Henry Site. Through this analysis, it has been established that limited plant remains persisted in the archaeological record, and that the composition of these remains is consistent with the established forest cover and known function of the site during the nineteenth and early twentieth centuries. However, the data do little to enhance our understanding of the specific form and function of the site within either the House and Garden culture or the regional plantation landscape of central Delaware during this period.

Although evidence of on-site horticulture and local agriculture might be expected at the John Henry Site, the current data do not provide support for an interpretation of a sophisticated economic and social framework focused on plant husbandry. Neither do the limited plant remains allow for a definitive explanation of the seasonality of cultural deposits at the site.

V. MANAGEMENT RECOMMENDATIONS

The John Henry Site (7NC-J-223) does not appear to be eligible for listing in the National Register of Historic Places. The site was originally considered for eligibility as a representative of an architectural type, the "House and Garden" dwelling. Historic research showed that although the house itself confirms to the type, the history of the property and its occupants does not. Arthur John Henry had a remarkable career, in which he worked his way up from laborer to become the owner of 40 acres of land, hardly a typical House and Garden plot. Indeed, Henry's career points out the danger in calling any property typical. Many houses that appear typical from the outside are found to have unusual histories.

However, the archaeological criteria described above for the House and Garden site type are still useful for evaluating the John Henry Site. The site does not meet those criteria. It now appears that before 1920, the house—J.A. Henry's residence—was located west of U.S. Route 13. Therefore, little information from before 1920 is likely to be present at Site 7NC-J-223, and little was found. No intact deposits were located dating to before the house was moved. (The original location of the house has been thoroughly disturbed by the construction of the Dupont Highway and an adjacent asphalt parking lot.) Although the yard landscape left by the last residents remains substantially intact, that landscape does not appear to be more than about 40 years old. The late nineteenth- and early twentieth-century landscape of the site has been completely obscured. Flotation of soil samples from around the yard did not produce significant plant remains. In terms of the criteria for integrity described above, the site possesses historical documentation and architectural integrity, but not landscape integrity or intact artifact deposits. For these reasons, further archaeological study of the John Henry Site would be unlikely to add significantly to our understanding of African-American life in late nineteenth- or early twentieth-century Delaware.

No further archaeological study is recommended at the John Henry Site.

VI. REFERENCES

Baker, Vernon G.
1980 Archaeological Visibility of Afro-American Culture: An Example from Black Lucy's Garden, Andover, Massachusetts. In *Archaeological Perspectives on Ethnicity in America: Afro-American and Asian American Culture History*, edited by Robert L. Schuyler, pp. 29-37. Baywood Publishing, New York.

Borchert, James
1980 *Alley Life in Washington: Family, Community, Religion and Folklife in the City, 1850-1970.* University of Illinois Press, Urbana.

Brown, M.L., J.L. Reveal, C.R. Broome, and G.F. Frick
1986 *Aspects of the Ecological and Vegetational History of Colonial Maryland.* Unpublished manuscript.

Brown, R.G., and M.L. Brown
1984 *Herbaceous Plants of Maryland.* University of Maryland, College Park.

1972 *Woody Plants of Maryland.* University of Maryland, College Park.

Carlson, Shawn Bonath
1990 The Persistence of Traditional Lifeways in Central Texas. *Historical Archaeology* 24(4):50-59.

Catts, Wade P., and Jay F. Custer
1990 *Tenant Farmers, Stone Masons, and Black Laborers: Final Archaeological Investigations of the Thomas Williams Site, Glasgow, New Castle County, Delaware.* DelDOT Archaeology Series No. 82. Delaware Department of Transportation, Dover.

Cronon, W.
1983 *Changes in the Land. Indians, Colonists, and the Ecology of New England.* Hill and Wang, New York.

Darden, N.J., and C. Darden
1978 *Spoonbread and Strawberry Wine.* Fawcett Crest, New York.

De Cunzo, Lu Ann, and Ann Marie Garcia
1992 *Historic Context: The Archaeology of Agriculture and Rural Life, New Castle and Kent Counties, Delaware, 1830-1940.* Delaware State Historic Preservation Office, Dover.

Deetz, James
1977 *In Small Things Forgotten: The Archaeology of Early American Life.* Anchor Books, New York.

Delaware Department of Transportation [DelDOT]
1920 DelDOT Road No. 1, New Castle County, Project No. 27. Section Between Pine Tree Corner and Armstrong's Corner. Available on microfilm at the Delaware Department of Transportation, Dover.

1931 DelDOT Road No. 1, New Castle County, Project No. 220. Section Between Reynolds Corner and Fieldsboro. Available on microfilm at the Delaware Department of Transportation, Dover.

Division of Health and Social Services
Death Certificates 1922 and 1929. Available on microfilm at the Delaware State Archives, Dover.

Downing, A.J.
1847 *Cottage Residences.* 3rd edition. Wiley and Putnam, New York.

1859 *Landscape Gardening, a Treatise on the Theory and Practice of Landscape Gardening, Adapted to North America; With a View to the Improvement of Country Residences . . . With Remarks on Rural Architecture.* 4th Edition, revised and enlarged. G.P. Putnam, New York.

Emerson, G.B.
1887 *A Report on the Trees and Shrubs Growing Naturally in the Forests of Massachusetts.* 4th edition, 7 vols. Little, Brown, Boston.

Eyre, R.H. (editor)
1980 *Forest Cover Types of the Eastern United States and Canada.* Society of American Foresters, Washington, D.C.

Ferguson, R.H.
1959 *The Timber Resources of Delaware. A Report on the Forest Survey Made by the U.S. Forest Service.* U.S. Department of the Interior, Washington, D.C.

Ford-Robertson F.C.
1971 *Terminology of Forest Science, Technology, Practice and Products.* English-language version. Society of American Foresters, Washington, D.C.

Geismar, Joan
1982 *The Archaeology of Social Disintegration in Skunk Hollow: A Nineteenth Century Rural Black Community.* Academic Press, New York.

Grettler, David J., George L. Miller, Wade P. Catts, Keith Doms, Mara Guttman, Karen Iplenski, Angela Hoseth, Jay Hodny, and Jay F. Custer
1996 *Marginal Farms on the Edge of Town: Final Archaeological Investigations at the Moore-Taylor, Benjamin Wynn (Lewis E), and Wilson-Lewis Farmsteads, State Route 1 Corridor, Kent County, Delaware.* DelDOT Archaeology Series No. 124. Delaware Department of Transportation, Dover.

Heite, Edward P. (with others)
1997 Draft Report on the Excavations at the Bloomsbury (Hurd) Site. Ms. submitted to the Delaware Department of Transportation, Dover, by Heite Consulting, Camden, Delaware.

Heite, Edward P., and Cara Lee Blume
1995 *A Community on McKee Road.* DelDOT Archaeology Series No. 109. Prepared for the Delaware Department of Transportation, Dover, by Heite Consulting, Camden, Delaware.

Henderson, P.
1887 *Gardening for Pleasure.* O. Judd Co., New York.

Hoseth, Angela, Wade P. Catts, and Rebecca Tinsman
1994 *Status, Landscape, and Tenancy at Mount Vernon Place: Final Archaeological Investigations of the Jacob B. Cazier Tenancy Site #2, State Route 896, New Castle County, Delaware.* DelDOT Archaeology Series No. 104. Delaware Department of Transportation, Dover.

Keepax, Carole
1977 Contamination of Archaeological Deposits by Seeds of Modern Origin, with Particular Reference to the Use of Flotation Machines. *Journal of Archaeological Science* 4:221-229.

Kent County Mutual Insurance Company Policies
Available on microfilm at the Delaware State Archives, Dover.

Kozlowski, T.T. (editor)
1972 *Seed Biology.* Academic Press, New York.

Leighton, A.
1987 *American Gardens of the Nineteenth Century.* University of Massachusetts Press, Amherst.

Lewis, Ronald L.
1981 Reverend T.G. Steward and the Education of Blacks in Reconstruction Delaware. *Delaware History* XIX(2):156-178.

Livesay, Harold C.
1968 Delaware Negroes, 1865-1915. *Delaware History* XIII(2):87-123.

Louis Berger & Associates [LBA]
1997 *Phase II Archaeological Resource Investigations, Site 44IW173, Route 603, Isle of Wight County, Virginia.* Submitted to the Virginia Department of Transportation, Richmond.

1986 *Archaeological, Architectural and Historical Investigations at the Howard Road Historic District, Washington, D.C.* On file at the District of Columbia Historic Preservation Office, Washington, D.C.

Martin A., and W. Barkely
1961 *Seed Identification Manual.* University of California Press, Berkeley.

Matthews, E.D., and O.L. Lavoie
1970 *Soil Survey of New Castle County, Delaware.* U.S. Department of Agriculture, Soil Conservation Service. U.S. Government Printing Office, Washington, D.C.

Medford, Edna Greene
1992 Land and Labor: The Quest for Black Economic Independence on Virginia's Lower Peninsula, 1865-1880. *Virginia Magazine of History and Biography* 100(4):567-582.

Medsger, Oliver Perry
1966 *Edible Wild Plants.* Macmillan, New York.

Minnis, Paul E.
1981 Seeds in Archeological Sites: Sources and Some Interpretive Problems. *American Antiquity* 46:143-151.

Neumann, T.W., and R.M. Sanford
1987 The Use of Vegetation Successional Stages in Cultural Resource Assessments. *American Archaeology* 6(2).

New Castle County Deed Books
Available at the Register of Deeds, County Courthouse Building, Wilmington, Delaware.

New Castle County Will Files
Available at the Register of Wills, County Courthouse Building, Wilmington, Delaware.

Panshin, Alexis, and Carl deZeeuw
1970 *Textbook of Wood Technology,* vol. 1. 3rd edition. McGraw Hill, New York.

Pearsall, D.
1989 *Paleoethnobotany: A Handbook of Procedures.* Academic Press, San Diego, California.

Rea, Samuel, and Jacob Price
1849 *Map of the State of Delaware, from Original Surveys.* Smith and Wister, Philadelphia.

Smith, E.
1985 Recovery and Processing of Botanical Remains. In *The Analysis of Prehistoric Diets*, edited by Robert Gilbert and James Mielke, pp. 97-123. Academic Press, New York.

Soil Systems, Inc. [SSI]
1983 *Archaeological Investigations at the National Photographic Center Addition, Washington, D.C.* On file at the District of Columbia Historic Preservation Office, Washington, D.C.

Stewart-Abernathy, Leslie C.
1992 Industrial Goods in the Service of Tradition: Consumption and Cognition on an Ozark Farmstead Before the Great War. In *The Art and Mystery of Historical Archaeology: Essays in Honor of James Deetz,* edited by Anne Elizabeth Yentsch and Mary C. Beaudry, pp. 101-126. CRC Press, Boca Raton, Florida.

Stine, Linda France
1990 Social Inequality and Turn-of-the-Century Farmsteads: Issues of Class, Status, Ethnicity, and Race. *Historical Archaeology* 24(4):37-49.

Stuart, M. (editor)
1989 *The Encyclopedia of Herbs and Herbalism.* MacDonald and Co., Ltd., London.

Tatnall, R.
1946 *Flora of Delaware and the Eastern Shore.* The Society of Natural History of Delaware, Lancaster, Pennsylvania.

Taylor, Randolph K., Timothy A. Thomson, Kimberly A. Snyder, and William M. Gardner
1987 *Final Archaeological Excavations at the H. Grant Tenancy Site, New Castle County, Delaware.* DelDOT Transportation Series No. 56. Delaware Department of Transportation, Dover.

U.S., Bureau of the Census
1870-1920 Population and Agricultural Schedules. Available on microfilm at the Delaware State Archives, Dover.

Wagner, G.E.
1982 Testing Flotation Recovery Rates. *American Antiquity* 47:127-132.

Watson, Patty Jo
1976 In Pursuit of Prehistoric Subsistence: A Comparative Account of Some Contemporary Flotation Techniques. *Mid-Continental Journal of Archaeology* 1(1).

Watts, M.Y.
1975 *Reading the Landscape of America.* Collier, New York.

Wyman, D.
1969 *Shrubs and Vines for American Gardens.* Macmillan, New York.